

THE ROAD TO THE WTO TWELFTH MINISTERIAL CONFERENCE

*A Latin American
and Caribbean
Perspective*



EDITED BY

Valeria Piñeiro, Adriana Campos, and Martin Piñeiro

The road to the twelfth Ministerial Conference: a Latin American and Caribbean perspective



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Foreword

This publication, which is a joint effort between IFPRI and IICA, comes at a time when the results of the United Nations Food Systems Summit 2021 offer an opportunity to implement economic and political processes that will enable the transformation of agrifood systems with the aim to sustainably guarantee global food and nutrition security.

In this framework, open, transparent and predictable international trade is essential for an efficient global food system and should be regulated by multilateral rules and standards aimed at promoting agricultural trade liberalization and reducing tariff and non-tariff barriers. The multilateral system should play an increasingly active role in limiting and reducing measures that distort trade and production and ensure the adoption and application of science-based sanitary and phytosanitary measures.

Currently, LAC agrifood exports represent about 14% of global agrifood exports and one-fourth of total exports in the region. Despite the role it plays, the region's agrifood trade is not without its challenges. Worth noting is that 86% of LAC agrifood exports are bound for external markets and 51% of the value of these exports is concentrated on just 10 products. This represents a great vulnerability and undoubtedly constitutes a challenge to be faced.

This situation spotlights the need for the region to diversify its production patterns and trade destinations, while also presenting an opportunity to increase its presence in international and regional markets, as well as to contribute to the supply of healthy, nutritious, safe and environmentally-friendly foods in the context of post-COVID-19 recovery and in response to the rising global demand for agrifood products by 2050 as a result of a growing population, increased urbanization, more health, safety and quality standards, a growing middle class and diet diversification, among others.

To enhance the strategic role of agricultural trade in Latin America and the Caribbean in developing sustainable agrifood systems and promoting regional and global chains, it is necessary for LAC countries to promote the renewal cooperation, particularly in the trading system. To do this, they must actively participate in the Twelfth Ministerial Conference (MC12) of the WTO, in order to reach an agreement on issues such as domestic support, market access, export competition, export restrictions, cotton, special safeguard mechanism, public stockholding for food security purposes and transparency.

This document is an inter-institutional effort that seeks to share ideas and reflections on the main issues to be addressed at the Twelfth Ministerial Conference of the WTO, we hope that it will serve as an input to strengthen the participation of the countries of the region in multilateral negotiations of the WTO, as well as the key role that the region's agricultural trade plays in the transformation of the agri-food system.



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Chapters related to Domestic support disciplines for the 21st century, Impacts of agricultural producer support on climate and nutrition outcomes, Plurilateral agreements under the WTO, WTO Dispute Settlement Cases Involving Latin American countries and the Agreement on Agriculture and the Technical paper on the MIRAGRODEP model of this book were undertaken as part of, and funded by, the CGIAR Research Program on Policies, Institutions, and Markets (PIM), led by the International Food Policy Research Institute (IFPRI). The opinions expressed herein belong to the authors and do not necessarily reflect those of PIM, IFPRI, or the CGIAR.

This publication has not been subjected to the standard peer-review procedure followed by the International Food Policy Research Institute (IFPRI). The content of the individual papers is the responsibility of the authors, and therefore the analysis, conclusions, and recommendations presented herein should not be attributed to IFPRI, FAO, GPS, IICA, INAI, or Bolsa de Cereales.

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Valeria Piñeiro, Adriana Campos and Martin Piñeiro



Executive Summary

The context in which international food trade takes place has changed considerably since the last Ministerial Conference (MC11) in 2017. Significant progress has not been achieved in many important issues that are still pending on the organization's agenda. Moreover, geopolitical changes and the Covid-19 pandemic have drastically impacted the institutional priorities of countries and the WTO itself. The global economy has substantially deteriorated over the past two years, with structural impacts in the areas of trade and food security, particularly for Latin America and the Caribbean (LAC). The multilateral trading system and its main organization, the WTO, have come under attack and are being discredited. The possibility of advancing towards coordinated solutions to major global issues through multilateral cooperation seems unlikely.

Countries have adopted a wide range of strategic decisions to respond to the effects of this situation on international trade and agriculture. Many have revised their trade policies to adjust them to different scenarios with respect to food security and agricultural trade flows. The surge in commodity prices and a fear of food shortages have led some governments to apply restrictive measures that limit or tax agricultural exports. Other measures adopted include direct market interventions through public stockholdings, special safeguard mechanisms, and state trading enterprises. The adoption of these measures has triggered new debates on their effectiveness in reducing food insecurity and propelling the development of fair and transparent food markets.

Regulations such as sustainability standards, access restrictions or domestic support measures must be transparent and aligned with WTO principles to avoid discretionary applications and discriminatory practices. Information transparency is key to access and develop new markets, especially under growing environmental scrutiny. Effective market access is crucial, not only for the development of agro-exporting countries (which prioritize this issue on their development agendas) but also for importing countries, as a means of guaranteeing food security and connecting main suppliers with buyers in regions facing food shortages.

The WTO dispute settlement mechanism has become a strategic asset for developing countries, enabling them to continue expanding their agricultural exports and strengthening their position in the market. However, the current state of paralysis of the WTO Appellate Body has recently affected the institution's effectiveness in regulating and arbitrating conflicts in the area of food trade relations. Most importantly, the growth strategy of Latin American countries depends on the WTO and the legal order that it enforces; therefore, actively contributing to its modernization and prioritizing its success as part of their trade and foreign policies is of crucial importance.

Ahead of the next Ministerial Conference (MC12), this book seeks to provide key insights on the topics that will be addressed and contribute to their discussion at the conference, which is the most important decision-making body of the multilateral trading system. The articles in the book evaluate different alternatives to solve these issues and their potential impact on international markets and agricultural trade. It is our hope that these insights will provide valuable input and become useful resources to reach successful agreements and, in turn, achieve a fair and effective global food system and more transparent international trade.

This book attempts to provide analysis, ideas and proposals that may enrich the discussions and thereby contribute to the advancement of agreements and decisions that may consolidate the role of the WTO as the main trade organization, as well as agricultural trade in general.



Introduction¹

Adriana Campos, Valeria Piñeiro y Martín Piñeiro

The Evolving International Context and Agricultural Trade

In December 2017 the WTO Ministerial Conference was held in Buenos Aires, Argentina. They were difficult times both in terms of economic and political uncertainties. The global economy was faltering and there was growing dissatisfaction with globalization and the global trading regulatory system had already surfaced and affected the spirit and environment in which negotiations in the multilateral trading system took place. Consequently, it also affected the deliberations in the Conference and the possibilities to attain progress in the themes that were under consideration like, such as a plurilateral agreement on fisheries and an agreement on public food stockholdings.

Four years have passed now after the cancellation of the Ministerial Conference, that was scheduled to take place in 2020 was cancelled as a result of the Covid-19 Pandemic. Over the course of these four years, most, if not all, of the fears and uncertainties of that time have materialized. Global order is under siege. Asia is now the center of global economic activities and economic influence, and the previously undisputed leadership of the Western world, through the Atlantic Alliance, has been put into question. New political alliances between countries that think alike are emerging. Within the context of a generally weakened multilateral system, food geopolitics and the global trading system are undergoing profound transformations.

Five disruptive events in particular have seriously affected the international context, and, in turn, the trading system and its main institution, the WTO:

First, the global economy has significantly deteriorated over the past two years and the future looks quite grim. According to recent projections made by the International Monetary Fund (IMF) in October 2021, the global gross domestic product (GDP) could grow by 5.9 percent in 2021 and 4.9 percent in 2022. However, this scenario is constantly evolving due to uncertainties in preventing new covid-19 cases. Many countries are still implementing social distancing, movement restrictions and other actions that impact domestic economic activity levels and could disrupt supply chains.

Latin America and the Caribbean (LAC) is one of the regions that has been hit the hardest by COVID-19, due to unique combination of factors that sets it apart from other developing regions. LAC is more urbanized than other developing regions, with about 80 percent of population living in urban areas. Informal activities account for half of employ-

1. We would like to thank Joaquin Arias for his contributions to this chapter.

ment, and high rates of overweight and obesity in the region further aggravate the current health, economic and social crisis. COVID-19 has caused socioeconomic indicators of most countries throughout the region to regress by a decade. According to the Economic Commission for Latin America and the Caribbean (ECLAC), the GDP in LAC fell by 7.7 percent in 2020 (the same amount as in 2010).

In addition to the reduction in the GDP, trade in goods in the region has also diminished (by 9.1 percent) and more than 2.7 million companies have shuttered as a result of COVID-19. In turn, the decline in economic activity has increased unemployment (with 8 million newly unemployed people), food insecurity (which has reached the same levels as in the year 2000) and poverty. Poverty has increased by 22 million people, reaching a total of 209 million people (the same levels as in 2005). By June 2020, 40 percent of the poorest households had experienced hunger and almost 50 percent were shifting their consumption towards less healthy diets, according to a survey by the Inter-American Development Bank (IDB).

Before COVID-19, about 60.5 million people in LAC could not afford a “nutrient-adequate diet” -that is, a diet providing an adequate amount of calories and minimum levels of all essential nutrients-. This number increased in 2020, and although the economy is recovering and allowing more people to afford this diet, it is expected that by 2022, between 800,000 (optimistic scenario) and 2.8 million (pessimistic scenario) more people will be unable to afford an adequate diet compared to before the pandemic in 2022 (Díaz-Bonilla and Piñeiro, 2021²).

During 2020, LAC agri-food exports resisted the impact generated by COVID-19 more than total merchandise exports: agri-food exports increased 2.7 percent, while total merchandise exports showed a fall of 9.1 percent³. In 2021⁴, the situation has improved, and agri-food exports increased 9.4% during January-June 2021 with respect to same period in 2020 while total merchandise exports have rebounded to an increase of 12.3 percent during same periods.

Second, the unfavorable global economic situation will feed into the growing disenchantment towards multilateralism in general and multilateral trade in particular. Several developed countries, like the U.S., and developing countries, like India and Argentina, have gone back on the policies implemented over the past decade related to market liberalization, reductions in production and export subsidies and other protectionist measures. These tendencies must be analyzed and discussed in order to identify new ways to progress

2. Badiane, Ousmane; Collins, Julia; Makombe, Tsitsi; Abdelaziz, Fatma; Breisinger, Clemens; Khouri, Nadim; Thurlow, James; Akramov, Kamiljon T.; Romashkin, Roman; Park, Allen; Ilyasov, Jarilkasin; Rashid, Shahidur; Ahmed, Akhter; Rana, Abdul Wajid; Chen, Kevin Z.; Timmer, Peter; Dawe, David; Li, Mengyao; Díaz-Bonilla, Eugenio; and Piñeiro, Valeria. 2020. Regional developments. In 2020 Global Food Policy Report. Regional Developments, Pp. 66-87. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/9780896293670_07

3. For more information: <https://blog.iica.int/blog/las-exportaciones-agroalimentarias-america-latina-caribe-crecen-27-durante-primer-ano-pandemia>

4. Calculations based on the <https://tradedatamonitor.com/> consulted October 6, 2021.

within the framework of broader, more profound multilateral agreements.

Third, the U.S. and China have embroiled themselves in a confrontation related to influence and power in the global sphere, disputing over matters related to technology access and military security, and becoming involved in a trade war whose evolution is uncertain and that has affected agricultural trade in a very unique way. Special agreements made in relation to agricultural trade has resulted in trade distortions and trade diversions that have affected other countries in several ways. These indirect effects are particularly serious in the case of corn, soybean and soybean by-products of which Brazil, Argentina and U.S. are the main world exporters. In addition, the pandemic has introduced additional intensity to the confrontation adding elements of further disagreements and distrust between the leaders of both countries.

China's agricultural imports from Latin America and the Caribbean (LAC) increased 4.9 billion dollars or 11.8 percent in 2020 with respect to 2019. Of the total agricultural imported by China from LAC during said period 61.3 percent corresponds to soybeans, 15.5 percent to beef, 4.4 percent to crustaceans, 4.1 percent to pork, 4.0 percent to poultry, and 3.3 percent to sugar. Of these six products, the largest increase in percentage terms, of 194.2 percent, occurred in pork imports, followed by an increase of 124.9 percent in sugar imports, 43.4 percent of beef, 21.9 percent of poultry meat and 4 percent increase in soybean imports, while crustacean imports decreased by 10.8 percent. Due to its high market share compared to the agricultural total and the change in percentage terms, the increase in beef imports was the highest in terms of value in dollars (2.2 billion dollars that amounted to a total of 7.2 billion dollar)⁵. In 2021, the trend in China's agri-food imports from LAC continues to be positive, showing a 9.7 percent increase during the period of January-August 2021 compared to same 2020 period, which is equivalent to an increase by 4.6 billion dollars that amounts to a cumulative of 52.5 billion dollars. In terms of the composition of imports, poultry imports declined 19.2 percent, while sugar imports, percentage wise, increase the most by 118.7 percent, while in value terms, soybean imports dominated with an increase of 2.1 billion dollars (6.8 percent) that accounts to almost half of the total increase in agri-food imports.

Fourth, the multilateral trading system in general and its main organization, the WTO, have come under attacks and being discredited. Difficulties have existed for some time now and have made it very difficult to achieve significant progress since the Buenos Aires Ministerial Conference in any of the organization's main agenda items Furthermore, omissions by and explicit actions carried out by the U.S., during the Trump administration, have substantially weakened the organization and its capacity to function. In this regard, three particularly relevant events should be addressed: a) the special trade negotiation agreed between the U.S. and China needs to be discussed. The agreement, on the one hand, has broken basic multilateral principles, but, on the other hand, serves as an example of some of the elements that could be incorporated in possible plurilateral agreements; b) blocking the designation of new members of the appellate body to replace those that have ended

5. For more information: <https://blog.iica.int/index.php/blog/importaciones-agricolas-china-desde-america-latina-caribe-aumentaron-248-por-ciento> and updates based on the <https://tradedatamonitor.com/>, consulted on October 6 2021.

their terms has de facto canceled the fundamental role of the WTO in the resolution of differences between member countries. It is absolutely essential that the Appellate Body is back in functions as soon as possible taking into consideration the elements that led to disagreements and c) the request that the system by which countries are recognized as developing economies be changed, has introduced resentment and lack of collaboration within the organization. A reasonable solution to this disagreement is essential.

Lastly, a Fifth and completely unexpected trend has emerged as a result of the COVID-19 pandemic, which has significantly disrupted the global economy and will likely have structural impacts on economic and trade matters. In the aftermath of the pandemic, a different world will emerge, with new attitudes towards globalization and free movement of people and goods, as well as a commitment to global solidarity. An unknown future will evolve with current trends accelerating and creating new and complex world challenges (Richard Hass, Foreign Affairs, April 2020⁶).

In LAC, the Covid-19 has generated high socioeconomic impacts in relation to a contraction of GDP, increasing unemployment, a reduction in per capita income, a fall in business activity, a reduction of trade, the worsening of the countries' fiscal situation, increasing poverty and increasing hunger and malnutrition. However, within this overall negative scenario, agriculture has not only suffered less, but has also become a buffer - absorbing part of the negative impacts of unemployment, poverty and economic recession - and an engine for the generation of income, jobs and international trade. For example, while annual LAC's total goods exports fell 9.1 percent in 2020, agri-food exports increased 2.7 percent in the same period. Given this, it is worth noting that agriculture and rurality play an important role in the recovery of the region and as such should be taken into consideration in the policies implemented by the countries.

Positive events that should be seized

However, not all is bad. There are also a number of developments that have a favorable impact on the global economy and trade. Some of them are the trade agreements reached between MERCOSUR and the European Union (EU), between USA and Japan, between MERCOSUR and EFTA, between Canada and the EU and several others. It is important that these and other potential agreements are finalized and implemented as soon as possible. These trade agreements could have a fundamental importance in relation to trade in general and agricultural trade in particular. In addition, they could be a significant contribution to the construction of a more open global system that could contribute to the emergence of a multipolar world with space and opportunities for all. Within this context, LAC should continue making efforts to take better advantage of the more than 140 preferential trade agreements (PTAs) signed during the last two decades, in addition to continuing with the regional trade integration processes.

6. Haass, R. 2020. The Pandemic Will Accelerate History Rather Than Reshape It: Not Every Crisis Is a Turning Point. Foreign Affairs.

Two other positive events should be mentioned. The first one is the Global Forum for Food and Agriculture (GFFA) held in Berlin in January 2020. The conference communique signed by 71 countries reinforces the message that trade plays a crucial role in achieving global food security, fighting malnutrition diversifying food supply and compensating food supply deficits; trade can be a major driving force for economic development by contributing to prosperity and employment; and trade promotes political and economic stability.

A second positive event worth considering is that 2021 will be a momentous year to position LAC agriculture in the global discussion. During the UN Food System Summit, held in September 2021, the world discussed how agriculture can contribute to the transformation of more productive, sustainable, and equitable food systems. The Ministers of Agriculture from Latin American and the Caribbean countries, jointly with the Ministers of the USA and Canada, have, in the institutional context of the Inter American Institute for Cooperation in Agriculture (IICA) endorsed a declaration with 16 main messages which express their position in relation to food systems principles and future directions⁷.

One of the key points of this regional declaration is that international trade plays a very important role in the transformation of national food systems, by connecting them and helping it create a more sustainable global food system.

Looking ahead: Latin America and agricultural trade

The structural conditions that have been discussed will greatly affect not only trade in itself but the political conditions under which trade negotiations will take place. Geopolitics will change, driving a shift in countries interests, policies and negotiating positions. In addition, their interests and their commitment towards multilateralism and the role of WTO as the organization responsible for this area will need to be reassessed. New difficulties but also new opportunities will emerge.

Within this context of change and uncertainty, three main challenges related to agricultural and food trade emerge. First, is reexamining traditional agricultural trade issues such as domestic support and market access with the context of a new world order, given the fact that their relative importance and urgency, as well as possibilities to progress in a multilateral strategy seem to have been diminished. The second, is identifying key elements and themes that can define the new roles, functions and institutional organization of the WTO as the main institution that oversees multilateral negotiations and trade. And the third, is identifying agricultural trade issues that may acquire greater importance and urgency and increasing the interest of sufficient countries in those issues in order to achieve successful outcomes. In particular, the identification of new themes that are becoming globally prominent as a consequence of the new environmental and nutritional dimensions of food systems. The papers included in this book address some of the issues associated with these three challenges.

7. <https://iica.int/en/press/news/sixteen-key-messages-united-countries-americas-road-un-food-systems-summit>

Addressing these challenges will require active participation by member countries. Countries, both individually and as part of geographic or political regions, will have different interests and views regarding the challenges ahead. With that in mind and based on the growing importance of food systems and all countries' responsibility to contribute to their development, this book seeks to identify the role to be played by Latin America, as well as the primary immediate challenges that the region faces within the context of the Ministerial Conference.

The papers in the book present new and interesting information and analysis to provide answers to these questions. Four issues are particularly relevant for Latin America: a) LAC countries actively participate in the Twelfth Ministerial Conference (MC12) of the WTO to present and defend their views and interests; b) countries of the Region develop action plans to take advantage of the more than 140 preferential trade agreements (PTAs) signed during the last two decades, c) the region could intensify efforts to consolidate regional trade integration processes and d) countries jointly work and promote trade policy measures that enhance the contribution of the agri-food trade to the development of food systems that are efficient and sustainable.

About the structure and content of the book

The book is organized in five sections: the first part covers the measures some countries took in the context of Covid-19 that had implications for the agricultural sector and that were discussed at the meetings of the Committee on Agriculture.

The second part relates to topics discussed at the WTO agricultural committee going into the MC12, in particular, domestic support disciplines where questions related to the idea of moving to a simplified framework using the concept of Overall Trade Distorting Support (OTDS), reducing excessive policy space and the introduction of product specific disciplines are analyzed; restrictions and export duties with a detailed analysis of which countries in LAC are applying duties and restrictions and to what products they are applied to; market access with the analysis of the current situation of high tariffs, tariff peaks, tariff escalation and tariff overhang (bound vs applied tariffs) in LAC; and public stockholdings (PSH), the special safeguard mechanism (SSM) and state trading enterprises (STEs).

The third part is about other topics relevant for agriculture and the WTO, and include the current status of the notifications presented by LAC countries on agricultural policies at the WTO; an analysis of the impacts of agricultural producer support on climate and nutrition outcomes; harmonization of sustainability standards under the WTO framework as the core to create an intersection of trade and environment; a modeling exercise to evaluate the feasibility of plurilateral agreements in the agricultural sector under the WTO given that this type of agreements have been considered among the feasible alternatives to advance

the liberalization of the international trade system; the WTO dispute settlement system and trade remedies for food products is analyzed; and the WTO dispute settlement cases involving Latin American countries under the Agreement on Agriculture is also surveyed and analyzed.

The **fourth part** of the book covers a verbal explanation of the global general equilibrium model, MIRAGRODEP, used for the analysis done in some chapters of the book.

Lastly, the book includes a section looking forward to the MC12 where some ideas and proposals are developed in special reference to the special needs and opportunities for LAC.



Measures taken in the context of the Covid-19 and discussed at the WTO Committee on Agriculture⁸

Adriana Campos

The purpose of this chapter is to take an inventory and to present the main content of some of the trade-related communications and declarations that WTO member countries submitted to the WTO Committee on Agriculture in 2020 and 2021 as response to the current pandemic.

Introduction

The Covid-19 pandemic induced a proliferation of economic and trade measures to deal with its effects on the population, including consumers and producers. Information became a valuable public good in today's global context. The fast-paced nature of the measures in which countries are responding to the impact of the pandemic, and their possible effect on markets, makes it more important for governments, companies and consumers to have comprehensive and up-to-date information about these measures, and to ensure that countries respect the commitments they acquired before the WTO which, indeed, are set out to avoid market distortions.

WTO notifications are a transparency commitment that governments undertook (in form and on time) to inform each other of their domestic measures that may affect international trade in goods and services. This requirement seeks to guarantee the transparency necessary to monitor compliance with the rules and commitments for predictable and better functioning markets. In addition, notifications are key to the proper functioning of the multilateral system and agricultural trade.

Some economic data

Agriculture plays a strategic role in Latin America and the Caribbean (LAC) in the sustainable development of many of its national economies, is one of the main sectors

8. Special thanks to Federico Villarreal and Daniel Rodríguez from IICA and Jose Javier Ocampo from the WTO, who played a collaborative role in preparing the content of this chapter.

that generates exports and is the most important economic sector in many countries. The average share of primary agriculture in the total gross domestic product in 2019 was 4.7 percent, with variations from a little over 2 percent in Panama to over 15 percent in countries like Nicaragua and Haiti. However, if the multiplying effects of primary agriculture on food systems and on the rest of the economy are taken into account, the share can double, such as in the case of Mexico (Morris et al. 2020).

In this context, the region's importance in international agrifood trade stands out, due to its strategic role in world food security. Indeed, exports from the LAC agrifood sector represent around 14 percent⁹ of world agrifood product exports and one quarter of total exports from the region. Likewise, the region includes some of the main net food producing and exporting countries, key suppliers of the world's "pantries," according to the index of net food exports per capita (Arias et al. 2020¹⁰), including Argentina, Brazil, Chile, Costa Rica, Ecuador, Paraguay and Uruguay. The increase in production and exports in recent years has turned the region into the world's greatest net food exporter.

During the pandemic, the region had a positive performance in agrifood trade with respect to that of total goods, which placed the sector as one of the main engines for economic recovery. Thus, in 2020, LAC agrifood exports resisted the impact of COVID-19 better than total goods exports. According to data for an aggregate of 17 countries from the region, in 2020 agrifood exports increased 2.7 percent while total goods exports decreased 9.1 percent (Salazar et al 2021). In nine of these countries, agrifood exports in 2020 grew in comparison to 2019, while the total goods exports decreased. In the rest of the countries, agrifood exports fell, but much less than the total of products.

Despite this situation, the region is not exempt from the challenges present even before the emergence of COVID-19. 86 percent of LAC agrifood exports are concentrated on a few markets⁴: the United States represents 23 percent, followed by East Asia with 19 percent. The Chinese market stands out with a share of 13 percent, as does the European Union with an 18 percent share. It is thus important to recognize that if a large percentage of basic agrifoods export income originates from a small number of markets, the economies will be vulnerable to problems in the export destination countries and to the conditions of the world markets for those products. In the medium and long term, these vulnerabilities can be translated into macroeconomic imbalances, which also affect the political, institutional and social environment.

This situation raises major challenges for the region, centered on the need to diversify production models, including agroindustry and trade destinations. At the same time, it presents an opportunity to increase the region's presence on international markets and to contribute to the supply of healthy, nutritious, safe food produced under suitable environmental management for the world.

9. This analysis was conducted by CAESPA at IICA with data from the United Nations. COMTRADE.

10. This analysis was conducted by CAESPA at IICA with data from the United Nations. COMTRADE.

This is especially true in a context of post-pandemic recovery and increasing world demand for agrifood products by the year 2050, as a consequence of population growth, increased urbanization, greater sanitation, health and quality demands, a larger middle class and the diversification of diets, among other aspects linked to the necessary strengthening and transformation of agri-food systems. (Rodríguez et al, 2021).

In the wake of the Covid-19 pandemic, Members put in place agricultural policies in an effort to minimize its impact on farmers and the population in general. A number of these policies took the form of domestic support, market access policies and export prohibitions and restrictions. In the midst of the pandemic, WTO Members convened a special meeting of the Committee on Agriculture to discuss these agricultural measures as they could potentially have implications on the agricultural markets and on members WTO commitments. In this meeting, members emphasized the importance of transparency and committed to provide, on a voluntary basis, information on all such agricultural policies. Members ad hoc reports are submitted and discussed at the meetings of the Committee on Agriculture. A summary of some of these ad hoc reports are described below.

Some 2020 measures

In November 2020, Switzerland¹¹, reported on its Covid-19 measures for the agricultural sector. The country reported two domestic support measures: a temporary increase in the contribution to the voluntary freezing of bovine and goat meat and special financial aid for reclassifying Swiss wines from 2019 and earlier with Appellation of Controlled Origin as table wines. Switzerland also reported three market access measures: the extension of import rights for tariff quota 5 (red meat) and an increase in volumes of tariff quota 7 (dairy products) and of tariff quota 9 (birds' eggs).

In the same month, Norway¹² reported extraordinary Covid-19 measures for the agricultural sector aimed at compensating crop losses due to the shortage of seasonal labor and making certain adjustments to the investment aid scheme for rural development purposes.

In September 2020, Brazil¹³ announced domestic aid programs applied to the agriculture sector during the pandemic. These included: Food Acquisition Program; National School Feeding Program; Funding and Investment Credit; National Program for Strengthening Family Farming; and National Support Program for Micro and Small Enterprises.

In the same month, Canada¹⁴ presented the commitments made by the country in response to Covid-19. These included: the Local Food Infrastructure Fund; Mandatory Isolation Support for Temporary Foreign Workers Program; Surplus Food Rescue Program; Cattle and Hog Set-Aside (AgriRecovery); Advance Payments Program: Stay of Default for eligible farmers; Plan to Develop Agriculture Sector and Create Jobs; 10percent reduction in Crop Insurance Premiums; Temporary Foreign Worker Isolation Protocol for Ag-

11. G/AG/GEN/164/Add.1

12. G/AG/GEN/172

13. G/AG/GEN/165

14. G/AG/GEN/167/Rev.1

riculture and Aquaculture; Risk Management Program; Ontario-Canada Agri-Food Workplace Protection Program; Ontario-Canada AgriRecovery for Hogs and Cattle; Financial investment to support the recruitment of agricultural workers; Loan guarantee of up to \$50,000; 6-month moratorium on loan repayment; Northern MB Food Security Support; Local Cooking Initiative; Food Distribution model; cattle set aside; Saskatchewan Premium Rebate; Livestock Set Aside Program; 2020 Canada/Alberta Fed Cattle Feed Cost Offset Initiative developed due to COVID-19; Agriculture Training Support; Alberta Beekeeper Stock Replacement; Temporary Foreign Worker Supports; B.C. Farmers Markets Transition to Online Systems; E-Commerce for B.C. Producers and Processors; Agri-Business Planning Program COVID-19 Recovery; Domestic Temporary Worker Accommodation Supports; On Farm Food Safety Program-PPE for COVID-19; Temporary Foreign Worker Supports; and B.C. Farm, Fish & Food Job Connector.

In August 2020, El Salvador¹⁵ announced the main measures taken in the context of the Covid-19 pandemic with implications for the agricultural sector. These measures included a modification to the Central American Import Tariff; the opening of a scarcity quota for rice in the husk; the opening of a scarcity quota for yellow maize (corn); the opening of a scarcity quota for white maize (corn); a temporary export restriction on red beans; special and transitional provisions for the Ministry of Agriculture and Livestock; and an import procedure under Legislative Decree No. 604. These measures expired as of 3 February 2020.¹⁶

In July 2020, the main actions announced by the United States¹⁷ in relation to the COVID-19 pandemic included: Coronavirus Food Assistance Program (CFAP); USDA Farmers to Families Food Box; Crop Insurance; Marketing Assistance Loans (MAL); USDA Farm Loans; Supplemental Nutrition Assistance Program (SNAP); Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); Food Distribution; Coronavirus Pandemic EBT; Paycheck Protection Program (PPP); and Economic Injury Disaster Loan (EIDL). Since the onset of the pandemic in the United States, the USDA has maintained a COVID-19 webpage that is regularly updated with all the activities the USDA is undertaking to respond to the pandemic¹⁸.

In July 2020, Paraguay¹⁹ submitted a report on the measures adopted by its government to deal with the Covid-19 pandemic that had some form of implication or consequence for the country's agricultural sector. These measures included:

- COVID-19 contingency measure: Provision of seeds, inputs, and technical assistance for 50,000 plots of farmland used by vulnerable families to produce food for their own consumption. The production plan amounted to approximately USD 8 million.

15. G/AG/GEN/163

16. G/AG/GEN/163/Add.1

17. G/AG/GEN/161

18. Visit <https://www.usda.gov/coronavirus>

19. G/AG/GEN/162

- “Ñangareko” program: Money transfers to informal workers to purchase food, medicine, and hygiene products. The benefit was provided as a one-time payment per person. Total amount: PYG 165 million. The program would benefit approximately 330,000 families.
- “Pytyvo” and “Pytyvo 2.0” programs: Aimed at the informal and formal workers (SMEs) most affected by the COVID-19 pandemic. The total amount of the benefit was provided as one-time payment per person. The payment was made in two installments, but only once per beneficiary and it could be used to purchase food, medicine, and hygiene products. Total disbursement: PYG 1,914,600 per beneficiary. Payments were received by approximately 2 million people.
- Agrarian Market Integration Project (PIMA): Improved market access conditions for producer organizations and indigenous communities, including mechanisms for investing in improving production techniques and incorporating the use of technology to enhance competitiveness and sustainability. The project would benefit approximately 170,000 small and medium-sized producers. Total amount budgeted: USD 25 million.
- Agricultural Equipment Bank (CAH) investment program: Investment program to be implemented by the Agricultural Equipment Bank (CAH) as part of the Covid-19-related measures introduced within the framework of the Paraguayan Guarantee Fund (FOGAPY). A total of 7,922 loans would be granted in 2020 in the economic, services, and consumption sectors.
- Capitalization of livestock sector MSMEs: To be implemented by the Livestock Fund for a total amount of USD 20 million. The loans were earmarked for production, animal purchases, and the livestock sector value chain, including working capital, transport, veterinary services, equipment, infrastructure, and technology.
- Establishment of an exceptional and transitional regime to facilitate the payment of taxes: Facilitates the payment of taxes for IRACIS and IRAGRO for the 2019 fiscal year and extends the deadline for the first IRE payment to July 2020.
- Reduction of import costs: Adjustment to fees related to goods imports, resulting in a 30-40percent reduction in import costs.
- Reduction of export costs: Digitization of export procedures.

In July 2020, Australia, Brazil, Canada, New Zealand, and Paraguay²¹ held a discussion about the transparency of Covid-19 related agricultural support measures.

In June 2020, the delegations of the Cairns Group²² presented a Covid-19-related initiative to the WTO titled protecting global food security through open trade. The countries established commitments on four major issues:

- Restraint on measures and roll-back: Commit to exercise restraint in establishing domestic food stocks of agricultural products that are traditionally exported so as to avoid disruptions or distortions in international trade;

21. RD/AG/77

22. Argentina, Australia, Brazil, Canada, Chile, Costa Rica, Indonesia, Malaysia, New Zealand, Paraguay, Peru and Uruguay.

- Food aid: Commit to not impose export restrictions or extraordinary taxes on food and agricultural products purchased for non-commercial humanitarian purposes by the World Food Program (WFP) and other humanitarian agencies;
- Transparency: Commit to be transparent about any agricultural Covid-19 trade-related measures and to inform the WTO.
- Reform: Commit to continuing to drive forward the reform process in the WTO to establish a fair, market-oriented agricultural trading system, including through positive and meaningful results at MC12²³.

In May 2020, a group of countries²⁴ presented a declaration aimed at responding to the Covid-19 pandemic with open and predictable trade of agricultural and food products. These countries accounted for 67percent of global exports of agriculture and agri-food products and 60percent of global imports of agriculture and agri-food products.

The cosignatories of the declaration committed to ensuring that supply chains remain open and connected; to not impose agriculture export restrictions; to ensure that emergency measures related to agriculture and agri-food products designed to tackle Covid-19 were targeted, proportionate, transparent, and temporary and did not create unnecessary barriers to trade or the disruption of global supply chains for agriculture and agri-food products; and to support the efforts of the WTO and other international organizations in analyzing the impacts of Covid-19 on global agriculture and agri-food trade and production²⁵.

Some 2021 measures

In March and September 2021, the European Union²⁶ submitted two updated reports on Covid-19-related domestic support measures adopted by the EU and its member states in the agricultural sector. The EU reported support targeting specific products such as cheese, butter, sugar, milk, fruits, vegetables and meat; in addition to support measures for workers, help for agricultural producers, and direct subsidies for the seed and wine sector.

In March 2021, the government of Israel²⁷ reported that it had authorized an additional water quota of 71 million m³ for agriculture so that local food production could guarantee adequate food supply during the crisis and that a special fund of 6 million Israeli Shekels (ILS) was granted to support the logistic expenses of public institutions recruiting volunteers to replace absent agricultural workers. Furthermore, 12 million ILS were allocated to fund non-profit organizations that coordinated the engagement of volunteers during the first COVID-19 wave (18 March – 30 June). A significant increase in volunteers in agriculture

23. WT/GC/218/Rev.1; G/AG/31/Rev.1; TN/AG/44/Rev.1

24. Australia; Brazil; Canada; Chile; Colombia; Costa Rica; Ecuador; European Union; Georgia; Hong Kong, China; Japan; Republic of Korea; Malawi; Malaysia; Mexico; New Zealand; Nicaragua; Paraguay; Peru; Qatar; Kingdom of Saudi Arabia; Singapore; Switzerland; Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu; Ukraine; United Arab Emirates; United Kingdom; United States and Uruguay.

25. WT/GC/208/REV.2 - G/AG/30/Rev.2

26. G/AG/GEN/159/Add.4 and Add. 5

27. G/AG/GEN/160/Add.1

was recorded during the crisis. Israel also created an aid package for agricultural activities affected by export constraints and for niche products for the local market. These included fresh produce affected by declining air transport and produce affected by the closing of the Flower and Plant Auction in the Netherlands and the cancellation of orders. The aid was provided for crops that were sold fresh and it was calculated so that growers who were hit the hardest receive a higher rate of assistance. The total aid would not exceed 600,000 ILS.

South Africa²⁸ reported the creation of a Covid-19 agricultural disaster support fund measure for smallholder and communal farmers only. The programme would provide assistance to financially distressed small-scale farmers as a result of Covid-19 and focused on farmers who were in production and preparing for winter crops. The objective was to complete the production cycle to ensure adequate food production and supply. Funding was provided in the form of a voucher system that was applied in partnership with distributors and manufacturers of these inputs. The grant was not to exceed ZAR 50,000 per farming operation.

Finally, in March, Japan²⁹ announced its Covid-19-related measures, including an emergency support project to ensure the availability of labor force in agriculture; the introduction and demonstration of smart agriculture to resolve the labor shortage; special emergency support measures, such as cattle fattening; emergency measures for businesses by facilitating the distribution of beef calves; projects to stabilize vegetable prices; priority support to promote and improve facilities to maintain and strengthen marketing potentials; measures to strengthen the supply of agriculture and livestock products; support for production in the next crop season in response to new domestic and overseas demand; support to promote the use of flowering plants in public facilities; emergency aid to support the inventory of Wagyu beef; and emergency measures to promote sales of agricultural products.

Conclusions

Transparency is one of the key principles of the WTO and plays a central role in monitoring compliance with its rules. It has become increasingly important in the WTO, and outside of its walls, as it contributes to political and business decision-making on the rapidly and constantly changing economic environment. The Covid-19 pandemic has evidenced even further the importance of transparency in a timely and proper manner. However, discussions in the Committee on Agriculture have shown that there is work to be done in this regard as countries have highlighted important areas for improvement in the reporting process of agricultural measures. Countries have called for cooperation and to intensify work on notifications in order to guarantee transparency.

The Committee on Agriculture meets 3-4 times a year in Geneva, Switzerland. Countries' participation in these meetings is key as they provide an opportunity for WTO member countries to exchange information, ask questions or raise concerns about each other's agricultural policies.

28. G/AG/GEN/180

29. G/AG/GEN/166/Rev.1

Transparency is not an end in itself, but a means for a better functioning multilateral trading system. The lack of compliance with notifications has been a source of concern and discussions in the WTO's committee on agriculture. There are a number of challenges faced by the countries of the Americas to comply with their notification obligations in the agricultural area. Countries often face difficulties in collecting the information to be notified; there is a lack of specialized personnel; problems determining which measures or policies should be notified; complexity of the information to be notified or the process of preparing the notifications; and coordination problems between national institutions³⁰. In this regard, governments can implement some actions that could potentially improve their performance in compliance with notification obligations. This includes:

- fostering cooperation and exchange of good practices,
- developing regional efforts to monitor and analyze trade policy;
- strengthen the institutions responsible for preparing notifications and analyzing agricultural policies by creating a department dedicated to the WTO;
- promoting a commitment to the WTO by national authorities at the highest level, and
- encouraging the participation of experts from capitals in the forums in Geneva as well as good coordination with delegates from missions to the WTO.

30. Source: Study prepared by IICA.

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Topics discussed at the WTO agricultural committee going into the MC12

New disciplines for domestic support

Joseph Glauber David Laborde and Valeria Piñeiro

Introduction

One of the hallmark accomplishments of the Uruguay Round Agreement on Agriculture (AoA) was the inclusion of agriculture in a system of multilateral rules and disciplines, including disciplines governing domestic support. Under those provisions, domestic support was capped based on support levels in a historical base period and then reduced over the implementation period of the agreement³². The AoA also encouraged Members to reform agricultural support towards minimally production- and trade-distorting support by exempting those measures from reduction commitments according to criteria laid out in Annex 2 of the AoA (the Green Box).

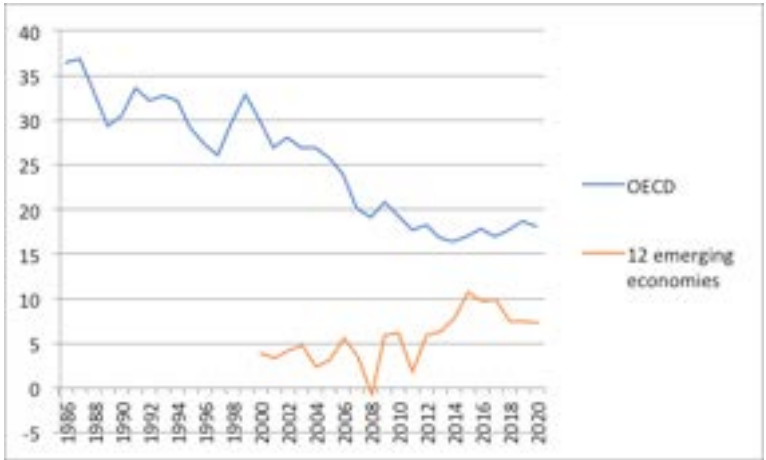
The immediate effect of the AoA was that many Members reformed their agricultural policies to comply with the new disciplines. Indeed, even prior to the conclusion of the Uruguay Round, two of the largest subsidizing Members--the United States and the Europe Union--had adopted policies that partially delinked payments from production, effectively capping payments (Josling, Tangermann and Warley 1996). By 2005, the average level of domestic support among OECD

31. This article was undertaken as part of the CGIAR Research Program on Policies, Institutions, and Markets (PIM) led by the International Food Policy Research Institute (IFPRI). Funding support for this study was provided by the CGIAR Research Program on Policies, Institutions, and Markets.

32. Developed countries were required to reduce trade-distorting support by 20 percent by 2000 while developing countries were required to reduce support 10 percent by 2005.

countries had declined to 26 percent of the value of production, down from 36.4 percent of the value of production at the time of the launch of the Uruguay Round in 1986 (OECD 2021). By 2010, the average level of support among OECD countries was 19 percent (Figure 1).

Figure 1 Evolution of domestic support among OECD countries and 12 emerging economies



Source: OECD (2021), “Producer and Consumer Support Estimates”, OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>

But since 2008, reforms among OECD countries have largely stalled. And over the past few years, support levels have increased due to trade wars and COVID. Support among large emerging economies like China and India have increased as well. Average support levels among 12 emerging countries³³ was largely negative 25 years ago as countries taxed producers by controlling output prices and taxing inputs. Since 2008, average support levels in those countries have risen and have average between 5 and 10 percent of farm receipts in recent years.

Many have criticized the AoA for providing numerous exemptions to reduction commitments (Glauber 2019). Article 6.5 of the AoA exempts support from reduction commitments for “production limiting programs” if such payments are made on the basis of fixed areas and yields or a fixed number of livestock. Article 6.2 exempts direct and indirect support measures such as

33. The 12 Emerging Economies include Argentina, Brazil, China, Costa Rica, India, Indonesia, Kazakhstan, the Philippines, Russian Federation, South Africa, Ukraine, and Viet Nam.

input subsidies if they are designed to encourage agricultural and rural development and that are an integral part of the development programme of developing countries. Under the de minimis provisions of AoA (Article 6.4), there is no requirement to reduce trade-distorting support in any year in which the aggregate value of the product specific support does not exceed 5 percent of the total value of production for that agricultural product. In addition, non-product specific support which is less than 5 percent of value of total agriculture production is also exempt from reduction. The 5-percent de minimis threshold applies for developed countries. The de minimis threshold is 10 percent of developing countries and 8.5 percent for China (WTO 2003).

A number of proposals aimed at reducing and harmonizing agricultural domestic support have been introduced by WTO members since 2017. Most of the proposals would eliminate or sharply reduce AMS entitlements or cap overall support at current de minimis thresholds. In some proposals, caps would be tied to historical entitlements (for example, JOB/AG/177. Rev2 and JOB/AG/199)) while others would tie caps to the value of production (JOB/AG/112 and JOB/AG/137). Several proposals introduce product-specific caps to prevent concentrating domestic support in a handful of commodities. Most all proposals would exempt Least Developed Countries (LDCs), and in some cases, Small and Vulnerable Economies (SVEs) and Net Food Importing Developing Countries (NFIDCs) from reduction commitments.

In the analysis which follows we examine three potential avenues for providing additional disciplines for agricultural support. The proposals would replace and strengthen domestic support disciplines in Article 6 of the Agreement on Agriculture with an overarching discipline on overall trade distorting support (OTDS). The new disciplines would harmonize support across Members by capping OTDS based on a percent of the total value of agricultural production (VoP). The level of ambition would be determined based on the percentage with special and differential treatment considered for developing country Members. To prevent Members from undermining the new disciplines by concentrating support on a handful of commodities, product-specific caps are also examined.

Overall Trade Distorting Support

Under the proposed discipline, the OTDS would include all forms of production- and trade-distorting domestic support under Article 6 of the AoA. This would include all measures that are currently notified under Article 6: amber box outlays (including de minimis); outlays notified under Article 6.5 (blue box); and outlays notified under Article 6.2 (the so-called development box). We also consider an alternative measure that would take into consideration special and differential treatment for developing countries by excluding outlays under Article 6.2 from the OTDS. As under the current AoA, such measures of assistance would be exempt from reduction commitments.

Under the current AoA, the current ceiling for a Member's total AMS was based on support levels over a historical base period (for example, 1986 to 1988), reduced over the implementation period by reduction formula laid out in individual Member schedules. The approach taken in this

analysis would base caps on a specified percentage a Member's total value of production. For Developed countries, a Member's OTDS in a given year could not exceed 5 percent of the value of production for that year³⁴. For Developing country Members, the OTDS could not exceed 10 percent of the value of production for that year. In keeping in line with its accession requirements, China's OTDS would be capped at 8.5 percent of the value of production for that year.

An overall cap based on the total of all agricultural production may leave much discretion to concentrate production- and trade-distorting support to a few key commodities. Our analysis considers a third scenario, where in addition to the overall cap on OTDS, anti-concentration measures would include product-specific caps that would cap support at a specified percent of the value of production for each commodity. Under the AoA, Members without AMS entitlements currently face an effective product-specific cap at the de minimis threshold for each commodity. In our scenario, we consider capping individual commodity support at twice the level of the overall cap. For example, for developed country Members, product specific caps would be set at 10 percent of the value of production for that commodity. Product-specific caps for developing country Members would be set at 20 percent of that commodity's value of production. China's product specific cap would be set at 17 percent of the value of production.

Table 1: Scenarios considered

Scenario	Baseline	OTDS	OTDS&6.2	OTDS&Cap
Description	Existing UR rules	OTDS = AMS + de minimis + Art. 6.5	OTDS + Art. 6.2	OTDS + Product level discipline
Constrained Policies	Amber Box	Amber and Blue Boxes	Amber, Blue and Development Boxes	Amber and Blue Boxes
Unconstrained Policies	Blue, Green and Development (Art 6.2) Box	Green and Development (Art 6.2) Boxes	Green Box	Green and Development (Art 6.2) Boxes
Constraint size	Bound AMS; De minimis thresholds based on current VoP: Developed 10%; Developing 20%. China 17%	Based on current VoP (5 year-Olympic av): Developed 5%, Developing 10%, China 8.5%		
Unconstrained Policies	Blue, Green and Development (Art 6.2) Box	Developed 10%, Developing 20%, China 17% of VoP		

34. The concept is like the percentage Producer Support Estimate (PSE) calculated by the OECD in its Agricultural Policy Monitoring and Evaluation report though it is important to note differences in how measures are constructed. The OECD PSE includes many measures that are currently exempt from discipline under Annex 2 of the Agreement on Agriculture (Effland, 2011). Russian Federation, South Africa, Ukraine, and Viet Nam.

The impacts of new support disciplines on agricultural markets

In this section we look at trade-distorting domestic support over the next 10 years assuming a business as usual baseline and then consider the impacts of proposed new disciplines on trade-distorting domestic support as summarized in the previous section and Table 1.

The modeling framework is based on IFPRI's dynamic global computable general equilibrium model, MIRAGRODEP. MIRAGRODEP has been widely utilized to study issues related to international trade and trade policy studying new agreements in the context of the WTO (Laborde, Piñeiro and Glauber, 2017), or regional negotiations (Bouet, Laborde and Traore, 2018)³⁵.

Policy space under an OTDS constraint

Figure 2 shows available support levels, expressed in 2017 constant USD in 2030, under the three scenarios. Under the business-as-usual baseline, over USD 1.4 trillion could be theoretically applied towards trade distorting domestic support (that is assuming full use of AMS and de minimis support and assuming continued use of Article 6.5 and Article 6.2 support proportionate to current usage and assuming 2030 projected production values). That estimate of policy space could be higher still if members increased the relative use of Article 6.5 and Article 6.2 in the future³⁶. Those policies are currently unconstrained.

Under the business-as-usual baseline, LAC countries account for just 10 percent of total support available to producers. Non-LAC developing countries are projected to account for over two-thirds of total policy space available in 2030. Developed countries account for the remaining 22 percent of the total available OTDS.

Total available trade distorting domestic support is projected to decline 61 percent from baseline levels by 2030 under the OTDS scenario. Most of that decline can be attributed to the reduction in available de minimis support (which has been cut by 50 percent from the levels under the AoA). The largest declines are for developed countries which, in addition to de minimis allowances, had large AMS entitlements under the baseline. On average, available OTDS for developed countries is projected to decline by 80 percent whereas available policy space declines by 59 percent for LAC countries and 55 percent for non-LAC developing countries. Under the new constraints, policy space for developed countries and LAC countries each account for about 11 percent of the total, while the share of available OTDS for non-LAC developing countries accounts for about 78 percent of the reduced total.

Inclusion of Article 6.2 measures under the OTDS (OTDS&6.2) is not projected to have much impact on policy space with only marginal effects on LAC and non-LAC developing countries. This is largely due to the large amount of policy space afforded by 10 percent of those countries' value of production (8.5 percent for China).

35. More information on MIRAGRODEP is provided in Appendix 1 while information on the construction of the business-as-usual baseline is provided in Appendix 2.

36. For example, if all Members increased Article 6.5 and Article 6.2 support to equal 5 percent of the value of production, available policy space could exceed 3 trillion USD. Russian Federation, South Africa, Ukraine, and Viet Nam.

Figure 2: Projected available policy space in 2030 as measured by OTDS (Billion 2017 USD)



OTDS = Amber support (including de minimis) + Art. 6.5

OTDS&6.2 = OTDS + Art. 6.2

OTDS&Cap = OTDS + product-specific caps

Source: Simulations based on MIRAGRODEP model.

Projected use of trade-distorting support in 2030

Use of trade-distorting support under the business-as-usual baseline is projected at USD 233 billion which accounts for almost 17 percent of available policy space under the baseline. High income countries are projected to utilize about 21 percent of available policy space while LAC countries and non-LAC developing countries are projected to use only 10 percent and 16 percent, respectively.

The reduction scenarios show a relatively small impact on spending. Capping the OTDS is expected to reduce actual use of trade-distorting support by only 2 percent, with all of the reduction coming from a reduction in use of trade-distorting support in high income countries (down 19 percent). Under the reduction scenarios, high income countries are projected to utilize 85 percent of available policy space. Use of trade-distorting domestic support among LAC countries is about the same as under the baseline, but because of the cuts in policy space, the utilization rates increase from 10 percent to 24 percent of avail-

able OTDS. Use of trade-distorting support under the OTDS scenario actually increases for non-LAC developing countries (up 5 percent from baseline levels). The increase in use reflects the fact that for developing countries with no AMS entitlements, the OTDS scenario would replace the implicit product-specific cap under de minimis provisions with an overall cap on all trade distorting support.

Including Article 6.2 support under the OTDS (OTDS&6.2) is projected to have no additional impact on use of trade distorting support. However, capping the OTDS and imposing product-specific caps (OTDS&Cap) is expected to reduce trade distorting domestic support by 22.5 percent for high income countries and by 3 percent for non-LAC developing countries. Use of trade-distorting support among LAC countries would be largely unaffected due to the relatively minor use of support by those countries.

Figure 3: Projected use of trade-distorting support in 2030



OTDS = Amber support (including de minimis) + Art. 6.5

OTDS&6.2 = OTDS + Art. 6.2

OTDS&Cap = OTDS + product-specific caps

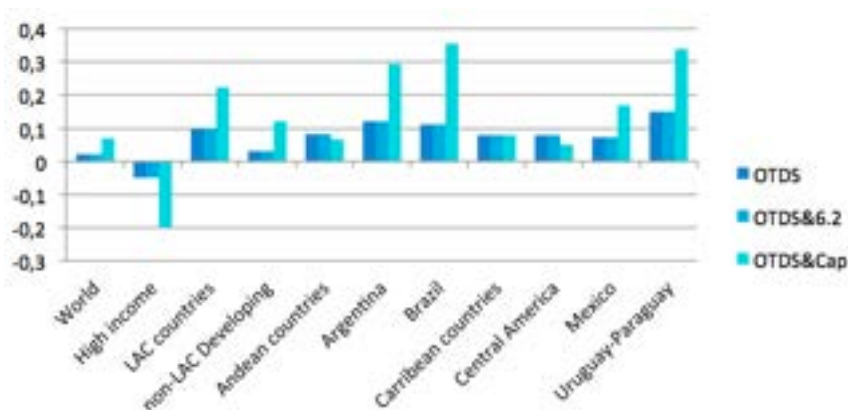
Source: Simulations based on MIRAGRODEP model.

Projected impact of reduction scenarios on agricultural production

Capping and reducing trade distorting domestic support is expected to have only small impacts on global agricultural production though there are small but significant shifts at

the regional level (Figure 4). Globally, the largest impacts occur under the OTDS scenario with product-specific caps (OTDS&Cap), where the global value of production is projected to increase by 0.1 percent. Production is projected to decline among high-income countries where the projected decline in domestic support is projected to be higher than among other country groupings. Production in LAC countries is projected to increase by more than 0.2 percent under the product-specific cap scenario (OTDS&Cap) with larger than average gains in Argentina (up 0.3 percent), Brazil (up 0.4 percent) and Uruguay-Paraguay up 0.3 percent.

Figure 4: Impact of reduction scenarios on the value of agricultural production (percentage change from 2030 baseline levels)



OTDS = Amber support (including de minimis) + Art. 6.5

OTDS&6.2 = OTDS + Art. 6.2

OTDS&Cap = OTDS + product-specific caps

Source: Simulations based on MIRAGRODEP model.

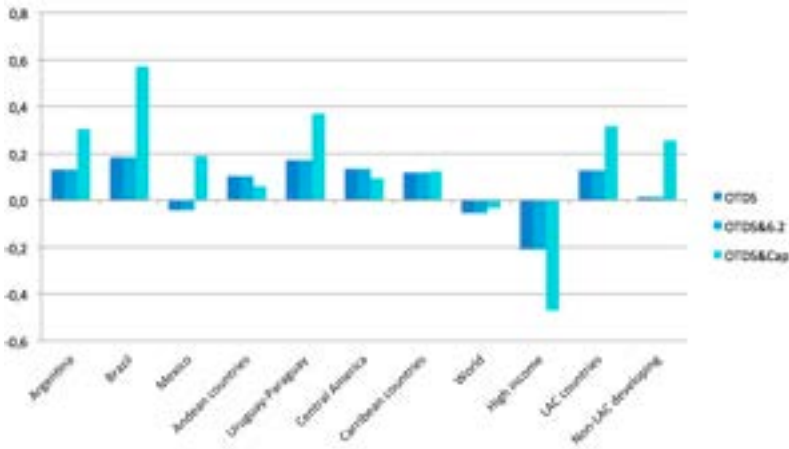
Projected impact of reduction scenarios on agricultural exports

Like production impacts, constraints on trade-distorting domestic support are expected to have small impacts on global exports (Figure 5). Total exports are projected down 0.1 percent under the OTDS scenario where amber plus blue box spending is constrained.

Much of the decline is expected to occur in the more highly-supported high income countries (down 0.2 percent). With the exception of Mexico, most LAC countries are expected to increase exports, with the largest increases in the Mercosur countries.

Capping the OTDS and imposing product-specific caps (OTDS&Cap) is expected to result in 0.5 percent decline in agricultural exports in the high-income countries, but much of that decline is expected to be offset by increases in exports from LAC countries such as Brazil (up 0.6 percent), Uruguay-Paraguay (up 0.4 percent), Argentina (up 0.3 percent) and Mexico (up 0.2 percent).

Figure 5: Impacts on reforms on agricultural exports (percentage change from 2030 baseline levels)



OTDS = Amber support (including de minimis) + Art. 6.5

OTDS&6.2 = OTDS + Art. 6.2

OTDS&Cap = OTDS + product-specific caps

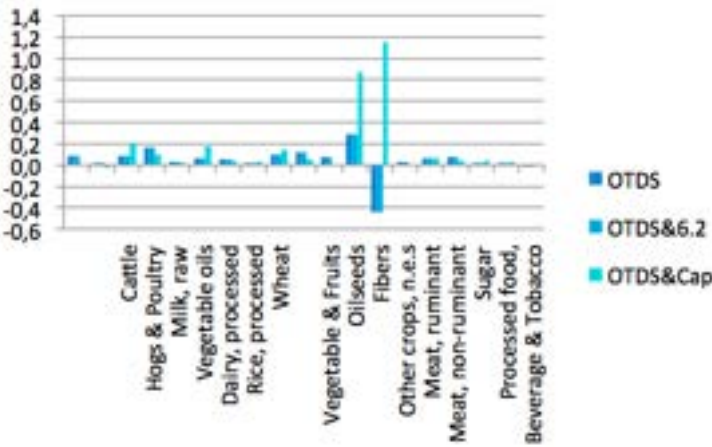
Source: Simulations based on MIRAGRODEP model.

Projected price impacts

Constraining domestic subsidies is expected to have small, but generally positive, impacts on agricultural prices (Figure 6). Prices for most agricultural products are expected to rise by less than 0.2 percent. Fibers are the exception as constraints on the OTDS are expected to result in increased global production resulting in lower fiber prices. Those im-

pacts are negated by implementing constraints on fiber-specific support in the OTDS&Cap scenario. Under that scenario, support for commodities such as cotton are constrained, which reduces productions and results in higher fiber prices.

Figure 6: Impacts of reforms on world prices (percentage change from 2030 baseline levels)



OTDS = Amber support (including de minimis) + Art. 6.5

OTDS&6.2 = OTDS + Art. 6.2

OTDS&Cap = OTDS + product-specific caps

Source: Simulations based on MIRAGRODEP model.

Impacts of domestic support constraints on farm income

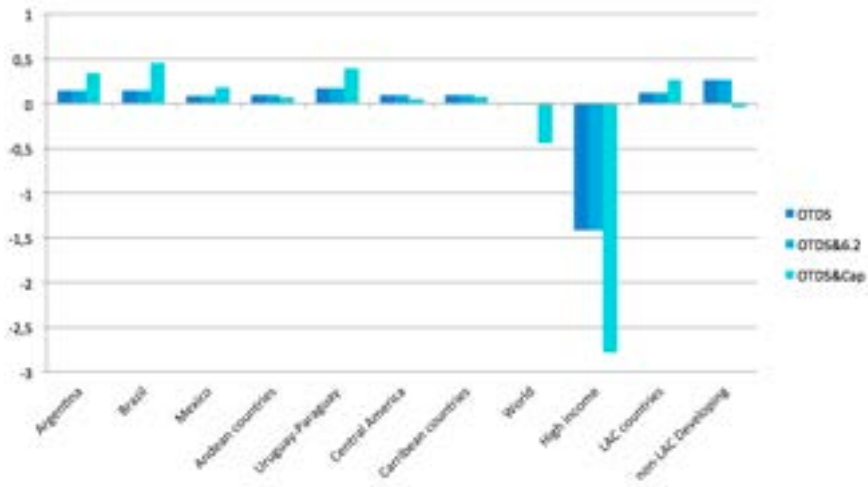
We now consider the impacts of domestic support disciplines on farm income. On the one hand, subsidized producers suffer income losses due to reduced farm subsidy payments. Those losses may be offset, to some degree, by increases in farm prices and receipts. On the other hand, those producers who are less dependent on subsidies generally gain because of price increases and potential shifts in production.

The impact of constraining OTDS on global farm income is negligible (Figure 7). Farm income in high income countries is projected to fall 1.4 percent from baseline levels with

a cap on OTDS and almost 2.8 percent when product-specific caps are imposed (OTDS&Cap). Those declines largely reflect the 20 percent decrease in trade-distorting support for those countries (Figure 3).

Farm income in LAC countries is projected to increase 0.12 percent over baseline levels in 2030. The Mercosur countries are expected to post slightly higher gains in farm income (0.14 to 0.17 percent increase). Capping product-specific support is expected to increase farm income by almost 0.3 percent in LAC countries while farm income in non-LAC developing countries like China and India are expected to be constrained by product-specific caps. Overall, average farm income in non-LAC developing countries is expected to fall marginally (down 0.05 percent) under the product-specific cap scenario (OTDS&Cap).

Figure 7 Impacts of reform on farm income (percentage change from 2030 baseline levels)



OTDS = Amber support (including de minimis) + Art. 6.5

OTDS&6.2 = OTDS + Art. 6.2

OTDS&Cap = OTDS + product-specific caps

Source: Simulations based on MIRAGRODEP model.

Conclusions

The proposed new disciplines on domestic support considered in this chapter are modest. Most of the expected impacts for most countries and agricultural products are small, at least at the global level. High income countries that subsidize agriculture are expected to absorb most of the negative impacts from the proposed disciplines such as reduced farm income or exports, but even those impacts are small. Producers in LAC countries are projected to gain as producer support in those countries would generally be unaffected by the new disciplines and because the region is expected to benefit from decreased production in other regions (such as in high income countries).

The disciplines would be most effective in cutting current “water” from existing domestic support disciplines under the AoA. The proposed disciplines would bring measures that are current exempt from reduction (such as support currently reported under Article 6.2, Article 6.4, and Article 6.5) under a broader concept of trade distorting support and those levels would be capped. In addition, product-specific caps are proposed. Lastly, the proposed disciplines also provide an architecture for future reductions as caps could be reduced further over time, thus both reducing and harmonizing domestic support levels across WTO members.

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Restrictions and export duties: a pending issue

Nelson Illescas and Nicolás Jorge

“It is very usual, in nations ignorant of the nature of commerce, to prohibit the exportation of commodities, and to preserve among themselves whatever they think valuable and useful. They do not consider, that, in this prohibition, they act directly contrary to their intention;”

(Hume, Of the Balance of Trade, 1742)

Legal treatment under GATT-WTO

Export barriers (or controls) can take a variety of forms -such as prohibitions, taxes, quotas or licenses, among others- and have been applied to industrial and agricultural products, both by developed and developing countries, while pursuing economic and non-economic goals. When both the Havana Charter - legal instrument intended to establish the International Trade Organization³⁷- and the General Agreement on Customs Tariffs and Trade - GATT - were negotiated, measures of this type were not a major issue of concern.

Born amid fear of protectionism after the 1930 crisis, the GATT focused mainly on access to markets, thus leaving matters related to export behavior almost aside. Hence one of the main reasons why export restrictions and duties -both being analyzed in this paper- are scarcely regulated by GATT rules, and later by the Agreements of the World Trade Organization (WTO)³⁷. However, the treatment for measures of this type is a different one.

By quantitative export restrictions we mean a condition restricting the export sales of a specific product. In the case India - Measures Affecting the Automotive Sector, the WTO's Dispute Settlement Body (DSB) held that a “restriction” need “not be a blanket prohibition or a precise numerical limit.” Furthermore, it “suggests the need to identify not merely a condition placed on [exportation], but a condition that is limiting, i.e. that has a limiting effect.”³⁸

37. As OIT was not created, GATT – which was conceived of as a temporary agreement- was left as the sole international instrument regulating the development of world trade.

38. India – Measures Affecting the automotive industry, WT/DS146 /R Paragraph: 7.270

In the event that a restriction becomes absolute, thus preventing exports, it would then be a prohibition on exports right away.

As a general principle, Art. XI.1 of GATT stipulated the prohibition of this type of measures. However, this is mitigated by paragraph 2 of Art. XI, sections 1 and 2, and the exceptions provided for in Art. XX, especially subsections i and j. Additionally, Article of GATT establishes disciplines regarding export prohibitions and restrictions. In any case, the grounds laid down in Art. XX are of an exceptional nature, and are to be interpreted with a restrictive view.

The regulation of export duties is even more diffuse. GATT distinguishes two types of customs duties: those applied to imports and those applied to exports³⁹ (Art. XI GATT). However, there is no definition in such instrument as to what should be understood by one or the other. Although the legal nature of the measure in question must be decided in the specific case, there is no doubt that if a fixed or variable amount of money is applied to the exports of a given product, it would be a customs duty levied on exports, and not of a quantitative restriction on exports prohibited by Art. XI.1 of the GATT.

The analysis of Art. XI of GATT serves as a starting point to establish the legality of export duties under GATT rules. Art. XI, in its first paragraph, generally prohibits the application of restrictions on imports and exports. However, it contemplates the chance to apply “customs duties, taxes or other charges” to those same imports or exports. Given that everything that it’s not explicitly prohibited it’s permitted, export duties are allowed by the WTO Agreements.

Treatment after Uruguay Round and Doha negotiations

Unlike import tariffs, countries are not required to establish lists of export duty concessions and do not have quantitative limitations on their application. However, some countries that entered the WTO after the Uruguay Round had to consolidate export duties and accept not to apply duties to products outside of these lists, and also had to accept reducing rates during a given period of tax relief.

China, through its 2001 Protocol of Accession to the WTO⁴⁰, agreed to eliminate all export taxes and charges except for a group of 84 products, for which a maximum consolidated tariff was set. Ukraine, upon entering the WTO in 2008⁴¹, agreed to the progressive reduction of export duties applied up to that time. When Russia joined in 2012⁴², it consolidated export tariffs for around 700 products, establishing a schedule for the progressive reduction of rates. Except for 200 products, the complete elimination of export duties was agreed within a maximum period of 5 years counted from its accession.

39. Articles. I.1, VII, VIII 1.a; XI.1; XXVIII bis of GATT 1994.

40. China Accession to WTO Protocol, WT/L/432

41. Ukraine Accession Protocol to WTO OMC, WT/ACC/UKR/152

42. Russia Accession Protocol to WTO, WT/ACC/rus/70

Quin⁴³ (2013) points out that the specific obligations established in the Accession Protocols for Members are enforceable under WTO law, since each of these instruments declares itself as “an integral part” of the Agreement on the WTO, which is itself a “covered agreement” for the purposes of the dispute settlement body (DSB). In other words, in case of violating their commitments, these countries can be brought to the DSB, as the “China - Rare Earths⁴⁴” case.

In the case of the negotiations, as part of the WTO Doha Round, there were attempts to put the issue on the agenda. In 2002, the Negotiating Group on Market Access brought the issue of export duties to the table. At that time, the United States proposal sought that only developing countries could apply export taxes at a uniform rate to agricultural exports and only for one year. Instead, the EU directly proposed the removal of all kinds of restrictions on the export of raw materials. Some net food importing countries, concerned about food security, such as Japan and Switzerland, proposed a complete elimination of both export restrictions and duties.⁴⁵

Further progress was made in the field of export restrictions. In fact, during 2008 - when the negotiations were reaching a closing point - a proposal was made so that members should justify any prohibition or restriction 90 days after these were affected. All existing restrictions were also eliminated within a year of their implementation, and the new measures would be limited to 12 or 18 months, with the consent of importers⁴⁶.

However, as time went by and negotiations stagnated, an agreement was not reached in the negotiations of the Doha Round of the WTO, so the issue did not make any progress either.

Which countries are applying duties and restrictions? And what do they apply to? The situation in Latin America

As part of a study by INAI Foundation (2009), a survey was made on the situation of duties and restrictions on exports among members of the WTO as from the time the Organization entered into force in 1995. As regards duties, findings showed that they were applied by 64 countries, that is, at least one third of the WTO members had applied or applied duties on exports. These measures were used much more frequently by developing and less developed countries than by developed countries.

As far as restrictions are concerned, the number amounted to 68 Members that applied this type of measures to limit the export of one or more products either in whole or in part. Point was made about the application of export restrictions among developed countries, in the sense that it was very frequent, to the extent that all of them used these measures, except for Iceland and New Zealand. Adoption was frequent as well by developing and less developed countries, as around half of them were using these measures in the period under investigation.

43. Quin surveyed 29 countries that joined the WTO in 2013 for his research. However, only nine of them were required to do so: Mongolia (1997), Latvia (1999), Croatia (2000), China (2001), Arabia Saudi (2005), Vietnam (2007), Ukraine (2008), Montenegro (2012) and Russia (2012).

44. https://www.wto.org/spanish/tratop_s/dispu_s/cases_s/ds431_s.htm

45. EXPORT CONTROLS: AN OVERVIEW OF THEIR USE, ECONOMIC EFFECTS, AND TREATMENTS IN THE GLOBAL TRADING SYSTEM. Joanna Bonarriva, Michelle Koscielski, and Edward Wilson. Office of Industries. US International Trade Commission, August 2009

46. <https://www.reuters.com/article/us-trade-wto-agriculture-export/factbox-export-issues-in-wtos-doha-round-farm-talks-idUSL037308920080722>

For this case, the decision has been to focus only on Latin American countries. The baseline information comes from the WTO⁴⁷ trade policy reviews, reports that examine trade policies and practices of each member of the institution on a regular basis and describe the institutions responsible for trade policy, as well as the macroeconomic situation. Except for the case of Argentina, whose latest version dates from 2013, in the rest of the countries these are documents that record policies in force between 2015 and 2020, years in which the reports were published.

According to reports, the Latin American countries can be grouped into three categories. A first grouping refers to those countries that directly establish the prohibition of the application of export duties in their national regulations. Such is the case of Bolivia, Chile, Ecuador⁴⁸, El Salvador, Grenada, Haiti, Jamaica, Nicaragua, Paraguay⁴⁹, Peru and the Dominican Republic.

A second group refers to those countries where export duties have been applied during the period under analysis to a reduced group of products. This is the case of Antigua and Barbuda (lobsters and fish), Brazil (cigarettes, hides and skins and weapons), Colombia (mild coffee, unset emeralds and charcoal), Costa Rica (bananas, coffee and live cattle), Dominica (sand and stone), Guatemala (coffee), Honduras (coffee and some minerals), Mexico (bitumen and asphalt, and bituminous mixtures), Panama (processed wood from natural forests), Saint Kitts and Nevis (live animals, cotton and some other products), and Uruguay (raw, salted, pickled or wet-blue hides).

Argentina is in the third group, Guyana and Suriname, countries that apply this type of measures to almost all of their exports. In the case of Guyana, duties are applied to all exports of “non-manufactured goods” at the general rate of 1.5%, with the exception of aquarium fish (5%) and seven other products, subject to specific rates. These provisions do not cover exports to the EU or the CARICOM countries, due to the provisions of their respective trade agreements.

In the case of Suriname, all exports, except those destined for CARICOM countries, are subject to an approval rate of 0.1%. In addition, a statistical rate of 0.5% is applied to exports of all products, except bauxite, which is subject to a statistical rate of 2%.

With regard to Argentina, the application of this type of measure is strongly linked to its economic history. Some authors trace its origin to the middle of the XIX⁵⁰ century, but in this study, it is more relevant to focus on the last two decades. In early 2000 Argentina

47. https://www.wto.org/spanish/tratop_s/tpf_s.htm

48. Ecuador does not impose export taxes, with the exception of bananas and coffee. However, the application of these measures was suspended in 2013 and 2015, respectively. WT / TPR / S / 383 / Rev.1. Page 76.

49. A bill submitted to the Senate in 2016 which contemplated the application of a tax on the export of grains did not come to a successful outcome. In the past, a tax was applied to the export of agricultural products in their natural state, which was repealed on January 1, 2005 by Executive Order No. 2,939 / 04, of July 26, 2004. WT / TPR / S / 360 / Rev. one. Page 62

50- “LAS RETENCIONES SOBRE LA MESA. Del conflicto a una estrategia de desarrollo”. Lucio Castro y Luciana Díaz Frers. CIPPEC. 2008

did not resort to this type of measure, but as result of the economic and social crisis of late 2001 and early 2002, export duties began to be applied. Castro and Diaz Frers (2008) point out that, after the devaluation of the Argentine currency in January 2002, an export duty of 10% was established on a wide list of agricultural and energy goods, and 5% on the rest of the products exported by Argentina. As time went by, rates were modified, reaching levels between 20% and 35% for the main export products of the country. In 2015, along with the change of political administration, most of the taxes were eliminated, but the economic crisis led to them being reinstated in 2018 and in 2020, with corrected values⁵¹.

As for agricultural products, the scheme is as follows: soybeans and derivatives with a rate of 33%; corn, wheat and sorghum at 12%; powdered milk, beef and poultry meat at 9%; sunflower, sunflower oil, wheat flour, peanuts and frozen fish at 7% and the rest of the products, regional economies in general at 5%. Industrial products and even the export of services are also subject to this type of export tax. This places Argentina as the Latin American country with the highest levels of export duties.

Regardless of whether or not they apply export duties, all Latin American countries - a pattern that is also observed in other countries in the world⁵² - have established the possibility to apply restrictions or prohibitions to exports for various reasons: public health; safety; the preservation of fauna and flora; protection of cultural, historical and archaeological heritage; compliance with international agreements and United Nations resolutions; among other issues.

Frequently enough, we can see that the exports of certain products are subject to some type of control such as obtaining authorizations, certificates, records, prior control documents and licenses, among others. Problems come up whenever a discretionary power is used, which can turn those controls into a de facto prohibition.

A more complex case is that of export controls used to support specific industries or to encourage national production of certain specific industries (Ecuador); ensure the supply of basic products or raw materials for the domestic market (Mexico, Honduras); for reasons of convenience for the economic interests of the country are determined by the Executive Branch (Panama); to considerations related to the promotion of national industry, such as the intention to increase added value or ensure the internal supply of raw materials (Paraguay); to ensure that the domestic demand for basic necessities is met (Uruguay).

Effects in international markets

Historically, export barriers have not only been set aside in multilateral negotiations but have also received less attention in terms of impact assessment on international trade than import tariffs. However, after the peak of food prices in 2008, they have become increasingly important as an object of study in an interesting series of research carried out through quantitative models.

51. Executive Order 230/2020. <https://www.boletinoficial.gob.ar/detalleAviso/primera/226273/20200305>

52. See Paper by INAI 2010

Trade barrier analysis is usually grouped into three sets of tools: computable general equilibrium models that include all economic sectors, including factor markets; partial equilibrium models that focus on the behavior of supply and demand in the sectors of interest; and gravity models, which explain trade in terms of “mass” variables, such as each country’s GDP, and “distance”, such as transportation costs. Each of these approaches has its strengths and weaknesses. But an interesting aspect about the recent literature on export barriers is that it embodies all three methodologies, so that the conclusions that can be drawn are broad and robust.

The first question that can reasonably be addressed is whether policy responses to isolate markets from international prices are sufficient to amplify upward dynamics significantly. Using a general equilibrium model, Bouët and Laborde Debucquet (2010) analyzed the case in which a demand shock raises international wheat prices by 10%. Given that context, if exporters implement an increase in export duties to cushion the impact on domestic prices, the international price would increase by 17%. Furthermore, in case importers implement the analogous measure (which may include import subsidies), the impact would rise to 41.1%.

Based on this analysis, the authors conclude that these types of policies effectively worsen the negative impact of food crises, especially for small importing countries. Moreover, they describe the situation as a non-cooperative equilibrium that decreases global well-being, calling for international cooperation in this matter.

Even though the conclusions are relevant, the scenarios posed by the work of Bouët and Laborde Debucquet (2010) are hypothetical. Thus, a second question that should be analyzed is whether the phenomenon was present during important events such as the 2008 crisis. To understand the impacts on observed historical prices, Will Martin and Kym Anderson (2011) developed in their research work from the World Bank a partial equilibrium model. Through a quantitative analysis, they found that the restrictions implemented by the countries explain 45% of the increase in international rice prices between 2005 and 2008, and 29% of the increase in the case of wheat.

Martin and Anderson thus conclude that the application of variable barriers to trade that, in principle, sought to cushion the impact of external shocks within each country, in fact amplified the volatility of international prices. Based on this, although the authors highlight the advances in the Uruguay Round on the import side, they find that the export side is still pending.

A third line of research seeks to answer whether, in fact, the policies applied by the countries respond endogenously. Giordani, Rocha and Ruta (2014) argue that there is a “multiplier effect” of trade policy, that high international food prices motivate the taking of policy measures that push them even further up, in a feedback loop. By using econometric techniques, they found that this hypothesis is not only verified empirically, but that it effectively explains many of the events between 2008 and 2011. They estimate that, on average,

an increase of 1% in trade covered by export restrictions or impulse to imports is associated to an increase in staple food prices of between 0.4% and 2.1%.

Since barriers to trade can take greatly diverse forms, it is worth asking specifically about the role of export duties. In this regard, Laborde, Estrades, and Bouët (2013) analyzed the impact of this policy on global welfare measures through the MIRAGE general equilibrium model. Interestingly, they found that eliminating these taxes would lead to an increase in global welfare of 0.23%, a more prominent improvement compared to what is expected as a result of the current agenda by the time of the Doha Round study. They find, however, that some countries, such as Argentina, could be affected by lower duties in the energy sector. The decline in the agricultural sector, on the other hand, would generate positive effects for the country, since the positive effect of removing distortions outweighs the loss in terms of trade.

A different strategy on the impact analysis of export duties was adopted by Olga Solleder (2013), who resorted to gravitational models. In particular, she found that a one percent increase in export duties translates into a 1.8% drop in trade, or up to 5.5% in extractive sectors. Among other conclusions, the author added that the cost of these measures is paid by both exporting and importing countries, and that some degree of responsibility can indeed be attributed to these taxes for the rise in international prices.

Finally, Estrades, Flores and Lezama (2017) extended the empirical analysis to various types of barriers to exports. As one of the main difficulties they faced was lack of data, they highlighted the importance of notifications and the need for effective information systems in the multilateral framework. To make up for this, they built a detailed database which, combined with the use of gravitational models, allowed them to characterize the importance of barriers to exports in the dynamics of international prices in the period 2005-2013. They found increases explained by export duties on dairy products, trees and plants, edible vegetables, oilseeds, fats and oils, sugar, food preparations, beverages, and residues from the food industry. Regarding other restrictions (prohibitions, quotas, licenses and reference prices), they found effects on live animals, dairy products, cereals, oilseeds, lacquers, gums and resins, preparations and raw leather.

Based on several studies with differing approaches, it is possible to draw some relevant conclusions. Firstly, there is a certain consensus that the multilateral system should play a role as a regulator of barriers to exports. However, it is not possible to draw from these studies which characteristics the applied rules should have. Those rules should rather be subject to negotiation. Secondly, although the reduction of these barriers could imply global benefits, there are countries that would be harmed if there are restrictions on these types of measures. Thus, they are reasonably unwilling to give up a valid policy tool without receiving an adequate compensation in return. Thirdly, it is necessary not to focus only on export duties, but rather on the fact that non-automatic quotas and licenses can be important barriers, especially since their effect is more pronounced. Finally, a proper information system is essential to ensure transparency in commodity markets.

The option of bilateral or regional regulation

Although this is an issue that requires a multilateral approach, as discussed above, this has not been possible. On the contrary, the prolonged stagnation in the Doha Round of the WTO has been one of the factors that have driven the mega-regional negotiations. These have been characterized by the number and size of the economies involved, their great geographic scope, and the breadth and complexity of the topics covered⁵³.

Among the most important ones are the negotiations for the Transatlantic Agreement on Trade and Investment between the European Union and the United States (TTIP); the Trans-Pacific Partnership Agreement (TPP); and a Comprehensive Regional Economic Partnership (RCEP) among the 10 ASEAN member countries, Australia, India, New Zealand, China, Japan and South Korea. Each has had mixed luck: the TTIP was discarded with the arrival of Trump to the US government, a situation that also led to the departure of the TPP, which was reconverted to the Comprehensive and Progressive Agreement of Trans-Pacific Partnership, and RCEP has yet to take off. To this set, even the Agreement reached by Mercosur and the EU may be added, mainly because of its magnitude, but not so much because of the scope or novelty of its provisions.

These initiatives, by that time, were seen as the only way to establish new commercial disciplines with a global scope. This was especially so in those domestic measures, which are more difficult to negotiate at a multilateral level, due to large differences in preferences and regulatory needs among countries. And one of the issues is precisely that of export duties.

In the final text of CCTPP it was stipulated that⁵⁴ no Party will adopt or maintain any duty, tax or other charge on the export of any good to the territory of another Party, unless such duty, tax or charge is also adopted or maintained on that merchandise, whenever it is intended for internal consumption. Exceptions are established for Malaysia - which consolidates tariffs at a certain level - and for Vietnam - which undertakes to reduce them progressively.

Regarding TTIP, although negotiations did not go on, there was a clause that specifically prohibited the application of export duties⁵⁵. This is logical since throughout the trade agreements that the EU has negotiated, from the constituent itself⁵⁶, such as those that it has initiated with third parties⁵⁷, a prohibition was imposed on this type of measures.

53. inai.org.ar/archivos/notas/Mega-Regionalismo%20y%20Comercio%20Agroindustrial.pdf

54. Article 2.15: Tariffs, Taxes or other Charges. <https://www.mfat.govt.nz/assets/Trans-Pacific-Partnership/Text-SP/3.-Trato-Nacional-y-Acceso-de-Mercancias.pdf>

55. https://trade.ec.europa.eu/doclib/docs/2016/march/tradoc_154369.pdf

56. TFUE, Art 28.1. establishes that "The Union shall comprise a customs union which shall cover all trade in goods and which shall involve the prohibition between Member States of customs duties on imports and exports and of all charges having equivalent effect, and the adoption of a common customs tariff in their relations with third countries" and Art. 35 stipulates that "Quantitative restrictions on exports, and all measures having equivalent effect, shall be prohibited between Member States."

57. [https://www.europarl.europa.eu/RegData/etudes/STUD/2016/534997/EXPO_STU\(2016\)534997_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2016/534997/EXPO_STU(2016)534997_EN.pdf)

Jiang (2018) analyzes about 50 regional trade agreements (RTAs), concluded between 2012 and 2016. It is pointed out that, in terms of export restrictions, many RTAs directly incorporate Article XI of the GATT, which prohibits the countries from using quantitative export restrictions in general. To restrict the scope of this provision, its application is reduced through the use of positive lists, which allow a party to restrict the export of certain products, or negative lists, which prevents a party from imposing restrictions on the export of certain products. In some cases, it goes beyond the provisions of the WTO, by restricting or excluding Article XI: 2 (a) in the RTAs. In this way the parties cannot impose quantitative export restrictions on reciprocal trade to prevent or alleviate “critical shortages” of food or other essential products. And with regard to export duties, there is a growing regulation of this type of measure. Of the 50 RTAs examined, only 15 lack provisions restricting the use of export duties. The other 35 RTAs prohibit contracting parties from using export duties in three ways: general prohibition of export duties (22 RTAs); using the negative list system (9 RTAs); and through a positive list (4 RTAs). As for the Strategic Association Agreement between Mercosur and the European Union, there are specific commitments regarding export duties. In this sense, the parties have agreed not to introduce or maintain any duty or tax on the export of a good to the other Party after 3 years from the entry into force of the Agreement. Nonetheless, there are some exceptions.

In the case of Argentina, export duties can be maintained for exports destined for the EU for a specified list of products that includes the soy chain, hydrocarbons, cork, paper and scrap.

In exceptional circumstances where relief from serious fiscal imbalances or a sharp and sudden depreciation of the local currency that requires immediate action is justified, the Agreement allows a Mercosur country, for a limited period of time, to introduce new ones or raise the level of export duties for those goods whose duties were in force as of December 31, 2018.

Said measure will be activated only as part of an economic program executed to address said exceptional situation and must be temporary, proportionate, so that it does not constitute a disguised restriction on international trade. And it will be phased out as that situation improves. In this case, a transparent channel for consultation and communication of such measure is proposed.

As it can be observed, the regulation of these measures has had a broad development at the regional level, ranging from the prohibition of their application in reciprocal trade, to less restrictive options enabling their application, under exceptional circumstances, though.

Towards the consolidation of export restrictions and duties. In exchange for what?

The effects of duties and restrictions on exports are well known and have been duly registered. To illustrate an example, the Buenos Aires Grain Exchange has produced a series

of studies referring to the impact of these measures on Argentine production and trade. And the results, based on the use of quantitative models and the qualitative contribution of specialists, are in line with the usual results in literature: export taxes (or duties) result in efficiency losses, reduction of exportable balances and contraction of the agricultural frontier (Tejeda Rodriguez, Ibarguren, Rossi, & Gianatiempo, 2018). And at the international level, the price crises in 2008 and 2011 were due to a multiplicity of factors, but there is usually a consensus that the use of this type of restrictive trade measures played an important role, by exacerbating the effects of increases in the prices.

A similar situation can be seen regarding the Coronavirus pandemic (COVID-19). Keeping in mind the policies that contributed to the 2007-2008 food price crisis, IFPRI have been tracking food export restrictions and documenting their impact. In the current COVID-19 crisis, there has been a movement of some national governments to restrict food exports. As result of that, the G20⁵⁸ has called for avoiding disruptions to trade, based on the need to ensure the flow of vital medical supplies, critical agricultural products and other goods and services across borders, avoiding unnecessary interference. These concerns are due to measures that countries such as Russia, Vietnam, Cambodia, Thailand, Kazakhstan and Serbia⁵⁹ have already put in place.

These measures can exacerbate shortage and volatility in commodities, having unintended consequences for vulnerable people in food-importing countries, and also negatively affecting producers in the export-restricting countries. According to IFPRI findings, by the end of august 2020, fortunately only two countries have measures restricting trade: Turkey and Kyrgyzstan. But during the months of greatest application of quarantine measures, restrictions were applied to the trade of food products in more than 20 countries⁶⁰.

Although they are not currently within the negotiating mandate in the WTO, in a somewhat near future, barriers to exports should be included in the negotiating agenda. In this sense, we have already observed that the GATT / WTO legal order, as a general principle, establishes the prohibition or quantitative restriction to exports (Art. XI.1 - GATT). The rationale behind this provision is the conception that customs duties (tariffs) applied in borders are more transparent, predictable and trade-stimulating measures than quantitative restrictions on imports or exports.

In relation to export duties, they are allowed and without quantitative or qualitative limitation. Regarding the countries that entered the WTO after its creation, there has been a tendency to prohibit its application and to consolidate them in lists, with maximum ceilings, in keeping with the approach of import tariffs during the Uruguay Round.

58. [https://g20.org/en/media/Documents/G20_Extraordinary%20G20%20Leaders%E2%80%99%20Summit_Statement_EN%20\(3\).pdf](https://g20.org/en/media/Documents/G20_Extraordinary%20G20%20Leaders%E2%80%99%20Summit_Statement_EN%20(3).pdf)

59. <http://inai.org.ar/archivos/otros/Coordinaci%C3%B3n%20global%20coronavirus%201-ABR-20.pdf>

60. <https://www.ifpri.org/project/covid-19-food-trade-policy-tracker>

With respect to regional agreements, the vast majority have opted for the prohibiting this type of measure in reciprocal trade. An exception seems to be the agreement between Mercosur and the EU, which, while prohibiting them, makes room for certain exceptions in some cases with maximum limits and for a specified time.

In the context of WTO, it is generally accepted that among the various types of export barriers, export taxes are the least damaging export control measure compared to other forms of controls. It should also be borne in mind that export taxes generate revenue for the government, are transparent and easy to administer⁶¹. However, the use of these tools be fitted into a legal framework. More frequently than one would expect, the alleged stimulated activity did not respond accordingly, but ended up having consequences on proprietary and third parties' food safety.

Anania (2013) analyzes various options with the aim of regulating restrictions and export duties that are part of multilateral negotiations. It ranges from the strictest application of existing regulations, to the total ban on its use. In any case, one of its proposals, perhaps the most feasible, contemplates a "total symmetry in the regulation of import and export restrictions".

To this end, it is necessary to replicate the tariffication process prior to the Uruguay Round, by which import restrictions that did not take the form of tariffs were converted into tariffs and subsequently consolidated. Here, all existing export restrictions would be taken to transform them into their equivalent in export taxes or duties, which would be consolidated. To guarantee minimum export volumes, export quotas with lower intra-quota duties will be introduced, the volumes of which will be defined in terms of a certain percentage of national production in a reference period. Finally, the author remarks that special and differential treatment would be applied to developing countries; through longer implementation periods, exemption from tax reduction commitments, among other provisions.

Moving towards the elimination of restrictions - or their tariffication if that is the case - and consolidating export duties should be a topic on the agenda of trade. If countries wish to monitor and eventually limit their exports, they should do so through a transparent and efficient system. The current WTO rule, unfortunately, provides countries with great discretion over which exports are to be banned or approved.

61. Piermartini, "Role of Export Taxes in the Field of Primary Commodities," 2004, 3.

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Market Access

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“All Members recognize the central role of agriculture and many state very strongly that agriculture should remain at the centre of any reform”. Chair of the COA Special Session, Amb. John Deep

FORD. 16 July 2018

Introduction

Market Access is one of the most significant and challenging pillars in the WTO Agreement on Agriculture due to its magnitude and the impacts associated with a change in agricultural trade rules. Increasing Market Access continues to be a relevant topic for Latin America and the Caribbean (LAC), a region which encompasses the world’s largest agri-food exporters as well as net-agri-food importing countries⁶². While LAC produce about a seventh of global exports in agri-food products⁶³, food and nutrition security remains a concern in several of its countries, with 14% of the population classifying as severely food insecure, 41% as moderately or severely food insecure and 49.8 million people being undernourished in 2020 (FAO, IFAD, UNICEF, WFP and WHO, 2021). Negotiations on market access are key for both LAC net agri-food exporting and importing countries with the objective to grant access to the products of exporters and to ensure the supply and food security not only for LAC importers but at global scale.

The COVID-19 pandemic has introduced a new level of urgency to the Twelfth Ministerial Conference (MC12) and the need to address underlying issues in WTO’s chapter on Market Access. COVID-19 induced a global economic contraction, that was estimated to be around 3.5% in 2020, with a decline in global output about three times greater than the global financial crisis in half the time (World Bank, 2021). Furthermore, the pandemic worsened the overall prospects for food security and nutrition. Recent projections

62. Such as Caribbean countries, El Salvador, Panamá, Surinam and Venezuela.

63. Agri-food products refers to chapters 1 to 24 of harmonized system (HS). Source: Own elaboration based on World Integrated Trade Solutions (WITS).

indicate that hunger may not be eradicated by 2030 and that 660 million more people are expected to face hunger in 2030, partly due to the enduring effects of the pandemic on food security (FAO, IFAD, UNICEF, WFP and WHO, 2021). While the full economic and social impact of the ongoing pandemic is yet to be understood, the global economy entered into a recession of historic dimensions, with differential impacts within and across countries and sectors, influencing future WTO negotiations (Barrett et al., 2021). As a response to the pandemic, around twenty Members imposed agricultural export tariffs and bans on products such as wheat, soybean, rice, eggs, onions, among others, holding significant negative ramifications for agricultural trade (Laborde, 2020, Torero, 2020). This exacerbated already existing tendencies towards increasing protectionism, culminating in trade conflicts between the United States and China. However, most of the early restrictions imposed were subsequently lifted and several of the trade-facilitating measures have been extended since (WTO, 2020).

Since the Uruguay Round, Members have been discussing agricultural trade reforms⁶⁴, yet progress in Market Access has remained in deadlock. The elements considered for possible outcomes at MC12 include transparency of changes in applied tariffs and the treatment of consignments en route; tariff simplification, transparency of Tariff Rate Quotas (TRQ) administration; and reporting of ad valorem equivalents (AVEs) of tariffs bound in non-ad valorem terms. These elements are in the spirit of enhancing transparency and facilitating agricultural trade without altering the core market access commitments that members currently have in their schedules (CoA Special Session, 2020). In general, all WTO Members acknowledge the necessity for further reforms on agriculture and express their commitment to advances. Nevertheless, reaching a consensus on the specificities of the proposals remains difficult, which in turn limits the prospects of a meaningful outcome at MC12.

Over the past two decades, tariffs on agricultural products have been reduced by more than one-quarter, yet they remain significantly higher compared to other sectors (USA Communication, 2018a). Complex market access barriers, tariff escalation, and tariff peaks played a vital role in previous negotiations on Market Access (Laborde, 2014 and Laborde & Martin, 2011 as cited in Piñeiro & Piñeiro, 2017). Recognizing that tariff escalation and tariff peaks were widespread in the post-Uruguay Round period, many negotiation proposals called for the elimination or reduction of tariff escalation and the cutting of tariff peaks as explicit goals within the Market Access pillar in the Doha Round (Cheng, 2007). Both issues have been at the center of negotiations for many years. However, at recent Ministerial Conferences these issues have been losing strength.

This chapter provides an overview of the status of Market Access by analyzing current agricultural tariffs from a Latin American and Caribbean perspective. The first section

64. For background information, see *Agricultural Trade Interests and Challenges at the WTO Ministerial Conference in Buenos Aires. A Southern Cone Perspective* Chapter 5. WTO 11th Ministerial Conference – Buenos Aires: Contributions on Market Access. p 71 (2017).

analyzes the current state of agricultural tariffs across LAC and their main trading partners with the objective to identify prevalent tariff issues. The analysis focusses on tariff structures, tariff peaks, tariff escalation and tariff overhang from a per country standpoint, identifying the most affected products. The subsequent section explores the different perspectives on trade policy reform of South America, Central America and the Caribbean. Finally, the last section provides an outlook on MC12 and final remarks.

Agricultural market access: are tariff issues still relevant?

ANALYTICAL STEPS AND DATA

Products selected. The analysis was carried out based on a selection of products that derives from an update of a CEPAL study⁶⁵ that review tariff averages of certain agricultural products related to 32 selected product groups⁶⁶, including cereals and oilseeds, meat and animal by-products, fruits and vegetables and other agricultural goods. For simplicity, each of the 32 groups of linked products were called “value chains”, being aware that the concept of production chains is broader and includes a set of activities ranging from inputs to commercialization and sale of the final product. With this clarification, the goods included in the value chains selected were divided into products without processing, with a first degree of processing (1stP) and a second degree of processing (2ndP). Since the objective is to make a diagnosis of current tariff situation, an update of the tariff items included on those value chains at six digits of the international harmonized nomenclature (HS) was made to work with the more recent tariff data available⁶⁷.

Countries considered. For a LAC perspective, the study focuses on 25 countries of the LAC region⁶⁸ which are primarily developing -except Haiti that is a least developed country (LDC)- and 10 main destination countries of its exports based on 2016-18 average agricultural trade from World Integrated Trade Solution (WITS) source (Trade Data - UN Comtrade). In some cases, a reduced number of countries (18 instead of 33) was used to exemplify: a selection of the top 10 LAC agri-food exporters which represents around 90% of total LAC exports including Argentina, Brazil, Paraguay, Chile, Mexico, Uruguay, Bolivia, Guatemala, Peru and Ecuador and top 10 destination countries covering USA, China, EU, Brazil, Japan, Russia, Viet Nam, India, Chile and Egypt. Note that Brazil and Chile are main exporters and importers of the LAC agricultural products. So, there are only 8 extra LAC countries.

Tariff data compilation. The applied and bound tariffs were downloaded from WTO Tariff Download Facility. For the analysis were implemented the ad-valorem equivalents

67. It is important to mention some of this study's limitations. As the selection of value chains from the CEPAL paper show an approach based on a South American perspective, it would be a partialized vision of the agricultural products affected by the measures. For instance, the study leaves out products such as tropical goods that are essential for some Caribbean economies and are usually exposed to high tariffs. Although the sample selected does not cover all agricultural products, it should be enough to introduce the tariff issues.

68. Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname.

(AVE) available at that facility. For the cases where there was no AVE available at WTO, the tariff information was collected from TRAINS Tariff Measures (WITS) or ITC Market Access Map, depending on the availability of product/country. It was used the latest available year for each reporter and the TRAINS-Ad valorem Equivalent estimated by UNCTAD method.

Definitions of tariff issues analyzed. According to the WTO Glossary, tariff peaks are relatively high tariffs, usually on “sensitive” products, amidst generally low tariff levels. There is not a formal technical definition of what is considered peak. The Glossary of World Integrated Trade Solutions (WITS) defines two measures of peaks that are used: International Peaks which are duties over 15% and National Peaks which are duties over 3 times the average of the tariff structure. This latter considers a peak in relative terms of the specific country tariff structure. Other documents express that the tariffs are considered high in a way that concerns when the AVE is over 100 percent. In this document, it was established an own definition of high tariffs and peaks in order to attend these types of characterizations. It was considered a high tariff when the applied tariff for each product exceeded the average applied tariff on the agricultural products selected for all WTO Members (14.1%) and it was defined as tariff peak when a country applied a tariff for a specific product which exceeded the median tariff of its own agricultural products by 3 or more interquartile ranges⁶⁹. Furthermore, tariff escalation is defined as the establishment of higher tariffs on the products of greater degree of processing to discourage the import of the products that usually can be produced domestically and tariff overhang consists of the difference between the applied and bound tariffs (according to the commitments under WTO).

MAIN RESULTS

Tariff Structure

Figure 1⁷⁰ shows the applied tariffs of LAC countries and main destination countries, giving a good indication of tariff spreads and structure in each country. The boxes represent the middle half of each country applied tariff distribution. For most LAC countries, the boxes are short and mainly distributed between 10 and 20%, which means that applied tariffs consistently hover around the center values. Nevertheless, a group of countries such as Belize, Dominica, Grenada, Guyana, Jamaica and Suriname, which are members of a

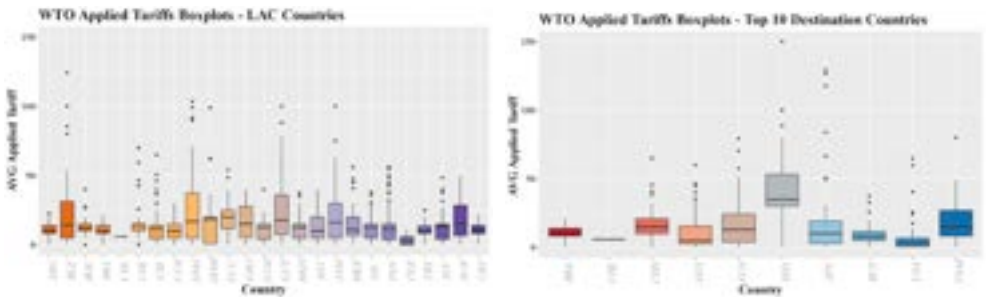
69. This last methodology is one of the many techniques used in data science to detect outliers in a robust manner. An outlier is an observation that is unlike the other observations, an object that deviates significantly from the rest of the objects of a sample. Most data mining methods discard outliers, however, in some applications such as this case, the rare events (tariff peaks) can be more interesting to analyze. Because we were unable to prove normality distribution of each country tariff structure applying Shapiro-Wilk's test and Kolmogorov-Smirnov (K-S) normality test, we decided to apply this method instead of using mean and 3 standard deviations.

70. A boxplot is a standardized way of displaying the distribution of data based on 5 summary measures (“minimum”, first quartile (Q1), median, third quartile (Q3), and “maximum”). (Galarnyk, 2018).

regional trade organization, i.e. the Caribbean Community (CARICOM), have taller boxes (and whiskers) implying more variable tariff structure and higher applied rates. Peru and Chile are the least protectionist, with shorter boxes and whiskers, and lower applied rates, followed by Mercosur countries.

For the top importer countries, the tariff structures are dissimilar. India is clearly the country that applies higher tariffs for most of its products: shows the taller box and whiskers and its box is much above the rest of countries considered. In the second place are the European Union and Viet Nam, with similar box and whiskers sizes (long tails to the right), displaying higher rates and more spread of tariffs than the rest. China shows a proportional distribution between its tariffs, with a shorter box and both sides equal whiskers. Egypt displays a long tail to the right distribution of tariffs, meaning that it presents higher peaks for specific products but not for all. The United States reveals a structure of low tariffs (short box and whiskers) but with high tariffs for certain sensitive products (many dots). As can be noted, there is presence of outliers (dots in the boxplots) for many LAC and importer countries⁷¹, like Belize, Dominica, Guyana and Jamaica with tariffs above 80% or India and Japan with tariffs above 100%.

Figure 1. Applied Tariff Structure for LAC countries and its main destination countries.



Source: Generated by the authors based on data from WTO, TRAINS, MacMap.

High tariffs

In this section, we compare the tariff averages applied by the LAC countries and top 10 destination countries for the agricultural value chains under consideration. According to our analysis, high tariffs are applied by 31 out of the 33 countries considered on at least one product. On aggregate, the shares of products with high tariffs in the selected agricultural products are

71. The plots were purposely cut in 125% and 150% due to scale issues (to avoid losing perspective). However, there are products with tariffs that well exceed that percentage, reaching values over 2000% in the case of Egypt for alcoholic beverages, for example.

similar across the countries considered, 31% and 32% for top destination and LAC countries, respectively. In average for the value chains with high tariffs, there are higher tariffs in extra LAC countries than in LAC: in 24 of out of the 32 value chains the destination countries applied higher average tariffs. There are 14 countries that applied an average tariff (ad valorem equivalent -AVE-) over 100% at least for one product, what accounts for 42% of the countries considered. Among this group, half are LAC countries including Belize, Costa Rica, Dominica, El Salvador, Guyana, Jamaica, Panama, and the rest encompass all the top destination countries extra LAC except China. Of these countries, India is the one that applies tariffs over 100% to the greatest number of agricultural products.

In LAC region⁷², the importer countries that apply the most restrictive (high) tariffs for the agricultural products selected are Belize, Dominica and Guyana, which are all CARICOM⁷³ members, followed by Ecuador, Jamaica, Suriname, Grenada, Dominican Republic, Colombia and Haiti, all of them with an average applied tariff higher than the average for all WTO Members. Analyzing products, the LAC countries do not present average tariff rates that exceed 26% per value chain. The chains with the highest import tariffs averages are grapes (26.0%) and poultry meat (25.8%), followed by honey, tobacco, flowers, pears and apples and pork meat, with tariffs slightly above 20%. In turn, the products with the lower tariffs include sorghum, soybean, wheat, rapeseed, forestry, cotton and garlic.

In the case of top 10 destination countries, the importers that apply the most restrictive tariffs for agricultural products are Egypt, India, and Japan, followed by Viet Nam, China, the European Union and the United States, all of which apply higher tariffs than the average for all WTO Members. Furthermore, we find the value chains with the highest average import tariffs to be grapes, tobacco, barley, pears and apples. The average rates exceed 50%, reaching up to 100% in the case of grapes⁷⁴. Applied tariffs well above 100% can be observed particularly in the 2nd processing stage. In the next tier of high tariffs rates, i.e. 20-50%, are the value chains of rice, sugar, dairy, wheat and tea. In contrast, the value chains with the lowest tariffs (below 10%) are rapeseed, cotton, soybean and forestry, where product categories with the least degree of processing have the lowest tariff averages.

In both cases we note that while some countries apply high tariffs across almost all agricultural products (e.g. India or Belize), others protect certain sensitive products (e.g. Egypt has the highest tariff peaks, exceeding 1000%, on value chains, such as grapes, pears and apples and barley).

72. In this case, Brazil and Chile are excluded from LAC region due to its incorporation in the top 10 destination countries.

73. The Caribbean Community (CARICOM) is a grouping of twenty Member states throughout the Caribbean, whose primary objectives is the promotion of economic integration and cooperation among its members (FAO, CDB, 2019).

74. This last average result is biased by the high tariffs applied by Egypt. Due to religious reasons, the country imposes an average tariff over 2000% on the 2nd processing of grape value chain (alcoholic beverages). Excluding this country, the average

Figure 2. Products affected by the highest tariffs for LAC countries and top 10 destination countries



Source: Generated by the authors based on data from WTO, TRAINS, MacMap.

Tariff peaks

Considering tariff peaks, in contrast to high tariffs, we find peaks to be present in 27 of the 33 countries in at least one product. Moreover, the shares of products with tariff peaks are different with 5% and 3% for top destination and LAC countries, respectively. We further find a larger number of products affected by peaks in top destination countries.

The importers with larger number of products affected (more than 20) by tariff peaks are Cuba, Costa Rica, Bolivia, Colombia and Panama in the case of LAC region, and Japan, Egypt, India, the European Union, the United States and China in the case of top 10 destination countries. The most affected value chains are dairy products, sugar, grapes, pork, poultry, tobacco, rice and beef.

Overall, we find that tariff peaks are present in both LAC countries and destination countries, with higher tariffs applied by the latter and the most affected products being grapes, pears and apples, tobacco, barley, rice, poultry, sugar and milk for all countries selected (See Figure 2).

This substantial number of high tariffs, as well as the prevalence of tariff peaks, provide high levels of protection and affect international trade, including exports from developing countries. Identifying the most affected products, i.e. the level of tariffs applied and the countries with a larger share of high tariffs, represents a starting point to discuss tariff ceilings while considering each country's tariff structure.

Tariff escalation

To identify the prevalence of tariff escalation (higher tariffs on the products of greater processing) we analyze the tariff averages applied by the selected countries, divided into without processing, 1st and 2nd processing stages. The green gradient in Figure 3 indicates that tariff escalation is clearly present in the value chains of cereals and oilseeds, such as rice, barley, sunflower, rapeseed, soybean and wheat, bovine meat, tobacco, sugar, cotton and berries, across the LAC region. Furthermore, the chains of barley, wheat, rice, soybeans, rapeseed, sunflower, sugar and tobacco also show the largest number of importers applying tariff escalation. In other value chains such as pears and apples, and olives, the escalation occurs mainly between goods without processing and those of 2nd processing stage. For peanuts, grapes, tea, and potato there is escalation between the first and second processing.

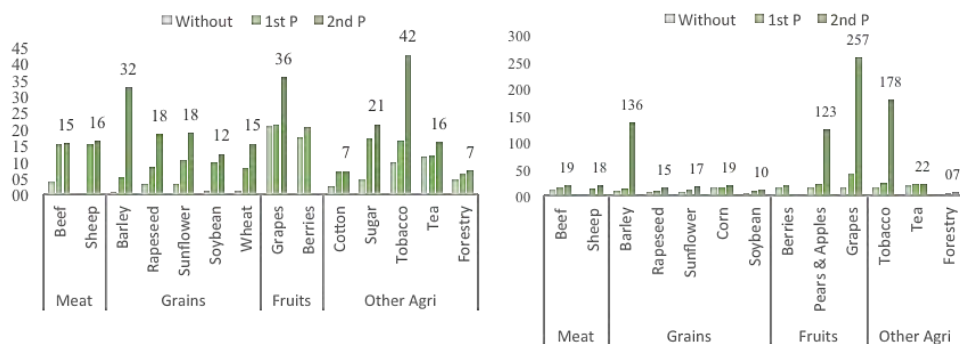
Tariff escalation was observed in similar products for the top 10 destination countries. The remarkable differences for coverage in LAC countries include corn instead of wheat for cereals and oilseeds and pears and apples regarding fruits. The chains of beef, pork, soybeans, grapes, pears and apples, tobacco, cotton and forestry show the largest number of importers applying tariff escalation. Within these value chains, at least 7 of the 10 countries expose tariff escalation in the constituent products. In others such as cotton, olive, potato and tomato, the escalation occurs mainly between goods without processing and those of second-degree processing. For sugar and peanut escalation occurs between the first and second stage of processing.

Even though tariff levels have decreased over the past decades, tariff escalation is still prevalent in main agricultural products. While tariff escalation may not be present across all processing stages, we find it to be widespread in at least two. Moreover, the tariff escalation in top destination countries is more pronounced than in LAC countries, showing the highest tariffs in the second processing stage.

Tariff Overhang (Bound vs. Applied Tariffs)

Regarding tariff overhang, we find the average bound tariffs for the LAC region and its main destination countries to be 50.4%, while average applied rates are 13.8%. The highest average bound tariff for agricultural products is 120.9% and the highest average applied rate is 53.4%. These findings indicate the prevalence of a substantial difference between applied and bound tariffs.

Figure 3. Average Applied Tariff for Selected Countries Per Value Chain and Level of Processing



Source: Generated by the authors based on data from WTO, TRAINS, MacMap.

Figure 4 shows that, from the 18 Members considered of top LAC agricultural exporters and main destination countries, developing countries exhibit a higher degree of overhang. This is illustrated by the dots' degree of proximity to the diagonal line of the graphs in the case of developed countries, where applied and bound tariffs coincide. The tariff overhang is expressed by the light blue vertical lines that connect the applied tariffs with the diagonal. Likewise, the bar chart shows the agricultural sector average bound and applied tariffs for the selected countries. As can be observed, Egypt and India have the highest bound and applied tariffs. Similarly, the overhang is noticeable in the difference of bars sizes that are greater for developing countries than developed. The EU, the United States and Russia present its applied tariffs very close to its bound average.

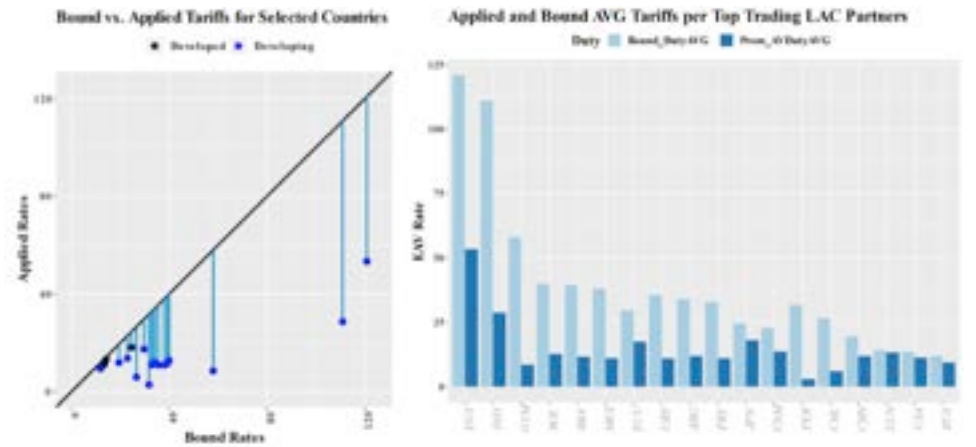
In this context, the United States indicates that approximately one third of WTO Members, of which nearly all are developing countries, have tariff overhang in their agricultural tariffs exceeding the average for all Members' agricultural tariffs (USA Communication, 2018b). The US further shows that overhang is prevalent in all major agricultural product groups, that the level is larger for developing Members and smaller trading economies than it is for most developed Members and large trading economies. This last fact is corroborated by our analysis of selected countries.

Our analysis shows that the average maximum bound rate⁷⁵ (434.8%) was much higher than the own average bound rate (39.1%), and the one of WTO Member average maximum bound

75. For the tariff data at 6 digits level of HS, the minimum, average and maximum bound rates are available. In this analysis we compare the average of maximum and average rates for all countries selected.

rate. Furthermore, 7 out of 18 countries present maximum average bound rates that exceed the 100 %, mostly extra LAC countries. Additionally, some LAC countries (Mercosur Members and Bolivia) were the only territories where the average maximum bound rates were close to the average bound rates (less than 20% of difference). For others such as Japan, Egypt, United States, Guatemala, India, Costa Rica and the European Union the difference between the average maximum bound rates and the average bound rates was of more than 150%.

Figure 4. Average Bound and Applied MFN AVE for Top LAC Exporters and Destination Countries (last available rates)



Source: Generated by the authors based on data from WTO, TRAINS, MacMap

When studying the value chains, the tariff overhang averages are similar. The analysis by product shows that grape must, live cattle, seeds (cotton, barley, soybeans, peanut), sugar raw, birds’ eggs in shell, wine, mandarins and tallow beef are the goods which contain the highest difference between bound and applied tariffs. Identifying the products with the greatest overhangs could be useful to define a first stage of possible cuts in bound tariffs at low cost, bringing certainty to negotiations without significantly affecting countries schedules.

Different LAC Perspectives on Trade Policy Reform

The COVID-19 pandemic had a large economic impact on LAC, with a decline in economic activity by 7% (IMF, 2021). As the pandemic slowed down economies, access to food

was negatively affected by income reductions, loss of employment and reduced accessibility of food. Compared to 2019, some 14 million people more in Latin America and the Caribbean were estimated to be affected by hunger in 2020 (FAO, IFAD, UNICEF, WFP and WHO, 2021). The economic impact driven by high unemployment rates continues to put dietary quality at risk. Supply and demand shocks within the food system are disproportionately affecting poor and nutritionally vulnerable groups (Picchioni, Goulao & Roberfroid, 2021). Even though governments worldwide contributed to keeping agricultural markets open and trade in food flowing, proving to be remarkable resilient to the pandemic, in many developing countries disruptions have emerged at national and regional levels and continue to pose challenges (FAO, 2021).

Negotiations on market access are, hence, key for both LAC net agri-food exporting and importing countries, yet with differing perspectives. South America encompasses some of the world's largest agri-food net-exporters, like Brazil and Argentina, located in the Southern Cone, as well as other net-exporters with a relatively open trade policy, such as the Andean countries. In the same way, Central America and the Caribbean comprise a diverse cluster of Small Island States (SIS), Larger Island States (LIS) and Continental States (CS)⁷⁶ which encompass both net-food-importing nations as well as countries with vital agricultural export sectors (FAO & CDB 2019). Caribbean SIS are net-agri-food importers and highly dependent on trade. While agriculture and agricultural exports have historically played a significant role in the economies of LIS and CS, they currently face the significant challenge of increasing intra-regional agri-food trade.

For exporting nations, agricultural exports are vital to employment creation, Gross Domestic Product (GDP) and trade as well as to ensure foreign exchange incomes and tax collection. Furthermore, LAC net exporters make a fundamental contribution to current and future food security, having the highest production growth prospects⁷⁷ due to abundant land and water availabilities, and potential productivity increases (GPS, 2013, Viglizzo et al, 2017). LAC's abundant natural resource endowments will allow the region to continue playing a major role in world agricultural production and trade, while facing challenges related to maintaining growth in a context of slower demand growth, lower international prices and shifts to sustainable and inclusive agricultural growth (OECD & FAO, 2019).

For importing nations, trade is pivotal to ensure food security, due to their heavy dependence on international markets for food consumption. For example, Caribbean countries spend more than half of their total exports value on food imports, with an increasing share over time. This exposes them increasingly to the triple burden of malnutrition, i.e. the prevalence of undernutrition, overweight and obesity, and micronutrient deficiencies.

Negotiations on market access are crucial for both LAC net exporting and importing countries, as granting access to products of exporting nations ensures supply and reduces

76. (i) Small Island States (SIS), with a population of less than 400 000 people; (ii) Larger Island States (LIS) with a population ranging from 1.4 to 10.8 million people; and (iii) Continental States (CS) with a population size between 350 000 and 17.3 million people.

food insecurity in importing nations. Trade policy reforms and changes in this field are consequently associated with diverse impacts across the region's nations and require balancing the demands of both food importing and exporting countries in WTO negotiations. The following is a discussion of the different perspectives.

SOUTH AMERICAN COUNTRIES

South America produces more food than required to feed its entire population, hence, contributing significantly to global food and nutrition security. As depicted in Figure 5, most of the countries are net agri-food exporters. However, technical-political challenges to achieve the sustainability of agri-food systems, such as intra-regional trade, the strengthening of food safety systems, control of transboundary pests and food loss and waste along the chain, remain (FAO, 2016). The region will play a strategic role in global food security during the next decades due to its potential production growth, based on abundant natural resources and potential productivity improvements associated with innovations and new technologies, which could be rapidly adopted, particularly in Argentina, Brazil, Paraguay and Uruguay, as has been the case during the last two decades (GPS, 2013).

The heterogeneity of agricultural production in Andean countries and the Southern Cone is caused by the diversity of the region's farm structures. Agriculture in the Southern Cone is dominated by large, commercial and export-oriented farms, particularly in Argentina and Brazil. These last two countries are among the world's largest exporters of wheat, maize, soybeans, meat and sugar. Other countries, such as Uruguay and much of the rest of the region, are characterized by smallholder and family agriculture (OECD & FAO, 2019)⁷⁸. Andean countries, on the other hand, traditionally export coffee, bananas, plantains, palm oil, sugar, cocoa, tobacco and flowers. In this sense, countries such as Chile and Peru are key actors for a nutritious diet, providing fruits and vegetables.

Agricultural exports are a significant contributor to the economies of the Southern Cone, representing more than 50% of total exports (in some cases almost 60%). In Andean countries, such as Bolivia, Ecuador and Paraguay, agriculture contributed on average 20% to total exports in 2016-18⁷⁹. Countries exporting metals or oil, such as Peru, Chile, and the

77. In this sense, while in the rest of the world the contribution of the agri-food products to exports is around 7.9%, in LAC region it is of almost a quarter of its total exports (23.4%) on average 2016-18. Source: Own elaboration based on World Integrated Trade Solutions (WITS).

78. Brazil was one of the agricultural growth leaders both in LAC region and worldwide, with an average growth rate of 4.1% between 1991 and 2015, due to productivity improvements rather than bringing more land into production.

The rest of Southern Cone and Andean countries' agriculture grew 2.8%.

79. Own elaboration based on data from World Integrated Trade Solutions. Considering WTO_H2_Aggr over Total.

Bolivarian Republic of Venezuela, do not depend exclusively on the income generated by agricultural exports (FAO and ECLAC, 2020). In general, South American's agriculture value added exceeds the world level (4%⁸⁰).

Figure 5. Net Agri-food Importing and Net Agri-food Exporting Nations.



Source: Generated by the authors based on data from WTO, TRAINS, MacMap

South America is shaped by differences in trade policy: Andean countries engage in open trade policies, such as the negotiation of Free Trade Agreements (FTA) and sanitary protocols with some of the largest world economies, whereas Southern Cone countries could not manage to make progress in signing FTAs with larger economies in the framework of the Mercosur trade negotiations. Chile, Peru and Colombia concluded FTA with the United States, EU, South Korea and China, among others. These countries joined Mexico to form the “Alianza del Pacífico”, a free trade-oriented area, and some of them also signed the Comprehensive and Progressive Trans Pacific Partnership (CPTPP) agreement, which includes nine other Pacific Rim countries (Málaga et al, 2019).

In the last two decades, Southern Cone exports were concentrated on few products, while export destinations tended to continuously diversified (Palmieri & Perini, 2018). In addition to traditional trade partners, such as the EU and United States, Southern Cone countries had expanded their agricultural exports mainly to emerging markets, such as Africa and Southeast Asia, reducing the share of traditional trading partners. On the other

80. Agriculture, forestry, and fishing, value added (% of GDP). World Bank. 2019.

hand, considering Andean countries' agricultural exports, the share allocated to the EU as a destination country increased -due to trade agreements-, followed by an increase in the participation in the East Asia-Pacific region. Overall, emerging countries gained participation as destinations of South American agricultural exports, while LAC countries reduced its share significantly.

Even with different levels of competitiveness among South American net agri-food exporters, they all face a variety of restrictions on trade, including tariff and non-tariff measures (NTM). As outlined above, certain traditional tariff barriers have a special importance, such as tariff escalation, tariff peaks and tariff overhang, due to their negative effects on production and exports, worsened in the beginning of the pandemic by the introduction of new export prohibitions and restrictions. The results show that different types of access restrictions continue to be applied by many countries and for several agricultural products, with a negative impact on world agricultural trade. This demonstrates the importance of dealing with these issues in multilateral negotiations. Furthermore, the lack of progress is leading to bilateral or regional negotiations that erode the non-discrimination principle.

Tariff escalation and peaks have a particularly pernicious effect on development by restricting industrial diversification in the poorest countries (Stiglitz & Charlton, 2004). Furthermore, tariff peaks are often concentrated on products that are of interest to South American exporter countries, involving major agricultural food products such as sugar, cereals and oilseeds, tobacco, meats and fruits. Tariff peaks are also closely related to the establishment of TRQs systems, whose complexity has been targeted in previous negotiations, although it is still an issue for agricultural exporters. Efforts to manage tariff peaks can be synergic to address also TRQs, tariff simplification and tariff escalation. Hence, from a South American countries' point of view, reducing tariff escalation and tariff peaks is critical for the development dimension of multilateral negotiations and tariff overhang is a major concern for exporters because it leaves space for (discretionary) increases of tariffs that affect predictability, disrupt trade and could harm their economies due to its highly dependence on trade, in a situation exacerbated by recent pandemic.

Some Members have expressed their concern about the increasing relevance of NTM measures on market access. The case of sanitary and phytosanitary measures with higher standards, and the introduction of the precautionary principle for environmental or sanitary issues is of special concern for Southern Cone exporters. These kinds of measures rise the costs of production and commercialization and often, effectively limit trade flows. It is also interesting to mention that a recent trend observed, especially in European countries, is to value local domestic products more than imported supplies. The current COVID-19 crisis will probably contribute to reinforce this trend.

Nonetheless, while tariff barriers have been decreasing in the last decades and non-tariff barriers were increasing, the former remain high and in the last couple of years tariffs were one of the main tools applied during the trade conflict between China and the United States. Particularly, it is important for exporters to remain involved in the process of WTO reforms, expressing their interests and concerns. After the MC11, the Cairns Group lead by agriculture exporting countries, including many of South American region, had encouraged negotiators to establish a work program including areas to focus and realistic milestones to avoid back-loading the agenda in the lead-up to MC12⁸¹. They proposed a work timeline to make a concrete step forward in the reform process during MC12 which sets the scene for comprehensive action at MC13 across agriculture. Highlighting that “the main priority of the Cairns Group remains to move forward on agricultural trade reform, which continues to lag behind other negotiating areas in the WTO and remains one of the most distorted sectors in global trade”. In the January 2020 Statement⁸² of the Cairns Group, they encourage WTO negotiators to achieve substantial improvements in market access for agricultural products particularly affected by tariffs and other non-tariff barriers, in order to create more equitable conditions for international trade. They also proposed a framework for negotiations on domestic support.

CENTRAL AMERICA AND THE CARIBBEAN

Over the past decade, Central America and the Caribbean have faced a variety of challenges: The loss of preferential EU market access for crops, such as sugar and bananas, has had a significant impact on the agricultural sector in coastal and big-island nations and triggered a decrease in export volume (by 40%) and an (ongoing) restructuring of the agricultural production in the region (FAO & CDB, 2019). At the same time, SIS have continuously increased their food import-dependency and, hence, their exposure to shocks on international markets. Climate change and extreme weather events are further impacting the trade capacity of many of these countries. The Central American Dry Corridor, for example, negatively affects the agricultural productivity of countries like Guatemala, Honduras and El Salvador (WFP, 2019).

81. JOB/AG/134 The Way Forward, Circulated on Behalf of The Following Cairns Group Members: Australia, Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, New Zealand, Pakistan, Paraguay, Peru, Thailand, Uruguay And Viet Nam.

82. 41st Cairns Group Ministerial Meeting Statement, agreed by Argentina, Australia, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Indonesia, Malaysia, New Zealand, Pakistan, Paraguay, Peru, the Philippines, Thailand, Uruguay and Vietnam; and Ukraine as a Cairns Group observer.

Figure 6. Net Agri-food Importing and Net Agri-food Exporting Nations.



Note: Net Agricultural Importing / Exporting Status was assigned based on a three-year average of agricultural export and import values (2015-2017). Source: Own depiction, data: FAOSTAT.

The differences across agricultural markets in Central America and the Caribbean are illustrated in Figure 6, which depicts agri-food net importer and exporter countries. The majority of SIS in the Eastern Caribbean, such as Antigua and Barbuda and Dominica, are net agri-food importers and rely heavily on international markets for their food consumption. The value of food imports of Caribbean nations more than doubled over the past decade, while the value of agricultural exports remained stagnant. The agricultural sector in SIS faces many challenges which limited their development, i.e. natural and geographic constraints, natural disasters, and limited trade competitiveness (Jansen, Stern and Weiss, 2015). SIS rely on tourism as major income source, which provides a steady inflow of foreign currency. This dependency on agri-food imports, however, makes Caribbean SIS particularly vulnerable to international market distortions and price swings. Furthermore, the region is increasingly affected by a significant rise in obesity rates and other non-communicable diseases, which follow trends in consumption of processed foods and import dependency (FAO & CDB, 2019). A large share of imported foods tends to be energy-dense and high in fats, sweetener and refined carbohydrates. Evidence has linked these foods to the increasing prevalence of obesity and chronic nutrition-related diseases (FAO, 2015, James and Rigby, 2012). Continued commitment

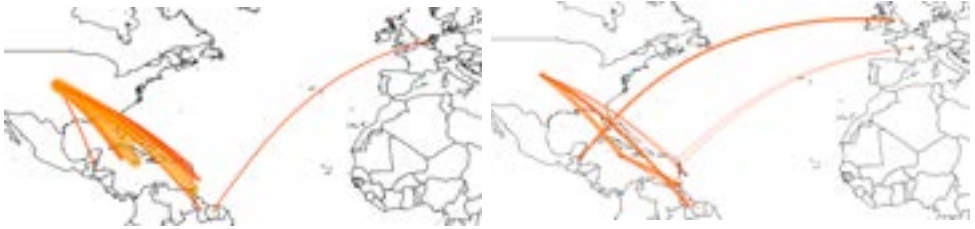
to improved market access and a reduction in tariffs contributes to reducing food import bills and food prices for consumers, while also contributing to diversifying imports and increasing access to healthier food options.

Agriculture and agricultural exports are a more relevant contributor to the economies of LIS, such as Cuba, Barbados and Jamaica, as well as CS, e.g. Guyana, Belize and Suriname. Agricultural sectors, however, developed along different pathways. Some agricultural subsectors are historically relevant export sectors that compete on world markets and earn foreign currency, while other subsectors are characterized by peasant farming (Josling et al., 2018). Historically, large plantations, i.e. sugar and bananas, produced agricultural exports. The loss of preferential access to EU markets and decreasing tariffs have opened markets to imports. This had a dramatic effect on export demand for sugar and bananas and catalyzed a restructuring of farming systems and a shift in exports from raw agricultural products to processed food and niche products, where regional competitive advantages prevail. Today Caribbean agriculture is, hence, more diversified (FAO, 2019). While tobacco, sugar, coffee and banana exports still contribute to the economy, also e.g. poultry, nutshells and citrus fruits, have become relevant export sectors.

While the export portfolio has diversified over time, the geographic distribution of trading partners of the region remains limited. Imports to Central America and the Caribbean are highly concentrated on a limited number of trading partners (see Figure 6). This high degree of import concentration contributes to making Central America and the Caribbean vulnerable to supply disruptions. Trends in food import dependency are influenced by changes in world food prices, increasing openness to trade integration, higher incomes and urbanization levels, which have led to altered patterns in diet, and as a consequence in trade patterns – changes likely of permanent nature. This increasing import dependency, and the associated negative impact on diets, could make it more difficult to further advance WTO-type Market Access.

Agricultural exports, however, are more diversified and indicate an increasing degree of regional integration among Caribbean and Central American nations, while beneath the US, also UK and France are prominent export destinations. Our analysis (Figure 7) has shown that the Central American and Caribbean nations, such as Belize, Dominica, Guyana, Suriname, Grenada and Dominican Republic apply the highest tariffs in the LAC region on a large range of agricultural products. This illustrates the significant scope for further tariff concessions and trade diversification.

Figure 7. Origin (left) and destination (right) of main agricultural imports.



Source: Own elaboration based on data from UN-COMTRADE.

For Central America and the Caribbean, demanding and emphasizing the continued commitment of WTO members to increasing market access and tariff reductions in MC12 is central from the perspective of both food-importing island nations as well as exporting countries. Yet, it is shaped by the challenge of balancing tariff schedules to facilitate food imports on one side, while also supporting the commercial exports of competitive subsectors.

Net food importing nations in the Caribbean rely to a large degree on international markets for their food supply. This dependency makes them vulnerable to supply shocks and price swings. Tariff reductions and the increasing diversification of trading partners contributes to reducing those risks. For exporting nations, tariff reductions and improved market access can lead to the expansion of export markets, such as mango, yams and pepper, as well as to the promotion of nascent niche products such as nutshells.

While many Central American and Caribbean nations are members of free-trade zones, such as the Caribbean Community and the Organization of Eastern Caribbean States, the US remains the region's main trading partner and source for agricultural imports. While regional trade agreements have contributed to increasing regional trade, technical barriers to trade still limit market access across the region and slow further integration. These aspects emphasize the relevance of continued commitment of Members to multilateral tariff reductions in MC12. The WTO has to resume its role to support the continued integration across nations.

The outbreak of COVID-19 had a strong negative impact on Caribbean nations, with the economies of tourism-dependent nations contracting by up to 9.8% in 2020. Higher international food prices added to an already large food import bill and prevailing travel restrictions dampened and continue to reduce revenues from tourism, which may contribute to a slow recovery in the medium term (Srinivasan, Muñoz and Ding, 2021). More than a year after the

outbreak of the pandemic, job loss and income reductions remain common across the region, holding the risk of further reducing the advances in terms of food security that were achieved in the region over the past decades (CARICOM, CDEMA, WFP and FAO, 2021).

FINAL REMARKS: Outlook on MC12

The emergence of COVID-19 and the trade conflict between the US and China reveal an unprecedented opportunity to address discussions on Market Access in the framework of WTO's negotiations. Both emphasize the need to focus on solutions at a global level and the importance of strengthening the multilateral trading system to oppose future protectionist escalations. This moment should be seen as an opportunity to reinforce multilateral channels, to contemplate about long-term issues in a coordinated manner and to strengthen the role of WTO as a forum to address global issues that affect all Members.

The pandemic affected the entire food system, through restrictions on movement, the hindering of food-related logistic services and the disruption of food supply chains (FAO, 2020). When faced with a lack of goods and services, importing countries seek to buy in advance and increase their purchases, and exporters tend to restrict their exports, thus creating the dreaded price hike, leading in turn to new restrictive measures to eventually end up in a global food security crisis (Illescas & Tejada, 2020). COVID-19 is estimated to have dramatically increased the number of people facing acute food insecurity in 2020-2021 (World Bank, 2021). It is especially important in food-agricultural markets to avoid the imposition of trade restrictive measures and to act in a coordinated manner to prevent a food security crisis. Transparency in the application of measures is also key to avert the uncertainty in markets and disruption of trade.

Already before the spread of the pandemic, escalating tariffs between the US and China triggered an increase in disputes that were submitted to the dispute settlement mechanism of the WTO (Laborde, 2020). This highlights the centrality of the WTO in settling trade disputes and COVID-19 gives new urgency to proper functioning of WTO's dispute settlement mechanism. Central America and the Caribbean, as a group of small countries, rely on the WTO's appellate body to settle legal disputes. In addition to increasing trade barriers, countries may introduce trade-distorting domestic support measures to support strategic food security goals and local agricultural production. WTO has to adjust its monitoring mechanisms to account for potential changes in domestic support schemes and to deal with emerging issues in the current situation.

For MC12, making progress remains a priority, a requirement even, for LAC countries. Given the negative effect on their development, their exports and imports, LAC countries have to push for advances in Market Access and discussions on the topics that could end up harming their economies. Our findings indicate that from a Latin American perspective, tariffs remain a critical issue in the Market Access pillar, which corroborates the significant scope for further concessions. For agro-exporting countries, gaining effective market access is vital to their development and that is why negotiations on this pillar remain a pri-

ority on their agendas. Also, this is crucial for importing countries as a means of ensuring sustainable food security and connecting suppliers and buyers in regions with food deficit.

Agricultural reform cannot be addressed without an outcome in market access, at least in incremental steps. To work on a timeline program during MC12, at least to lay the foundation for future work and comprehensive action at MC13, seems to be an alternative to move forward in a difficult scenario like the current one. In this sense, the focus should be on specifying topics and timeframes to address each issue. Starting with the enhancement of transparency in tariff schedules is an important first step, but then it is necessary to move forward on simplifying structures and reducing tariff peaks and overhangs, to level the playing field for all WTO Members. A breakthrough in reducing tariff overhang could provide certainty at low cost and give a positive signal to markets in favor of the multilateral system.

In moments where the rules-based system is under discussion, the G20 leaders recognized, in their last meeting, the crucial role of international trade and investment as “engines of growth, productivity, innovation, job creation and development”. In fact, the leaders reaffirmed their support for the necessary reform of the WTO to improve its functions and highlight the willingness to work to ensure fair trade to foster an enabling business environment.

The multilateral rules-based trading system has a key position in ensuring trade without discrimination and granting equal opportunities to all Members. The challenge is great for negotiators but also for each country. The commitment of all Members is needed if the WTO is to preserve the role for which it was created: reducing obstacles to international trade and ensuring a level playing field for all, thus contributing to economic growth and development in a stable and predictable environment. It is important to keep working on alternative proposals and finding common ground to make the first steps of this reform come true.

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Public Stockholdings, Special Safeguard Mechanism and State Trading Enterprises: What's food security got to do with them?⁸³

Eugenio Díaz-Bonilla

Introduction

Food security has been invoked for a variety of trade policy interventions and in many trade negotiations. This chapter focuses on three trade topics for which food security concerns have been mentioned as the rationale (or at least part of it) for their inclusion in the WTO negotiations: public stockholdings (PSH), the special safeguard mechanism (SSM) and state trading enterprises (STEs).

The first two issues have been repeatedly raised as part of food security in trade negotiations (see for instance (WTO, 2019a)). Trade negotiations about STEs have been mainly related to export competition and not to food security concerns (which would normally imply trade issues on the import side). But there is a growing interest on ensuring notifications in the Working Party on STEs (see for instance WTO, 2019b). Therefore, I will briefly comment on this topic in a separate section.

Public Stockholdings for Food Security Reasons.

As a background it should be noted that the operation of PSH is allowed under the Green Box of the Agreement on Agriculture (AoA), but with some operational and notification requirements: developing countries can build PSHs using market prices and can provide domestic food aid to consumers out of them at subsidized

83. With due recognition of Tina Turner.

prices⁸⁴. But some developing countries want to be able to buy at non-market prices when the food security products are bought from low-income, resource-poor producers (LIRP). However, doing that would violate the general criteria for domestic support to be part of the Green Box (opening a huge loophole for other possible modifications with negative effects on developing countries) and may affect producers in other countries. As of this writing, WTO member countries have not yet agreed to a solution, but have established a peace clause that, under certain conditions, protects developing countries from challenges under the AoA (but not necessarily under the Agreement on Subsidies and Countervailing Measures (ASCM)) and they have committed to find a “permanent solution” (Díaz-Bonilla, 2014)

During current negotiations some proposals from developing countries (for example WTO, 2019a) have expanded on what they would like to see in a permanent solution related to PHS. For instance, a) it would apply only to developing country Members; b) the PSH would be excluded from the calculation of Members’ Aggregate Measurement of Support; c) it would apply to existing as well as future PSH programs for foodstuffs; and d) there should not have ceilings to the quantity or value procured.

As a counterpart to those flexibilities, the stocks procured under such programs a) should not “distort trade” or “adversely affect the food security of other Members;” and b) the products cannot be exported. Also, countries using PSH programs, should follow transparency requirements, but should not impose “onerous burdens” on developing countries and especially Less Developed countries (LDCs) and Net Food-Importing Developing Countries (NFIDCs) (WTO, 2019a).

Several points need to be considered in assessing proposals around PSHs. First, the definition of “developing country” has come into question. In particular, the United States (WTO, 2019c) has raised the issue in the context of the negotiations of the permanent solution of PHS and SSM⁸⁵.

Second, it is important to consider whether there are caps (or not) on the quantity or value procured. As noted in Díaz-Bonilla 2017a and c, developing countries use public food stocks with different objectives: for emergencies (type1); for food dis-

84. For instance, Brazil and other developing countries buy food for their domestic food security programs at market prices. It also makes sense in terms of fiscal account: buying at market prices will not further increase the program’s procurement costs (though other operational costs and the sales subsidy still remain). In addition, as in Brazil, some percentage of the food purchased must come from small farmers as defined in national legislation.

85. The document argues that PSH and SSM “have continued at the insistence of self-declared developing Members, which have used development status as an excuse to pursue increased protectionism rather than meaningful trade reform initiatives at the WTO...” (para 4.13, page 12). In particular the document singles out India and Indonesia, “which have high bound tariffs and already provide high levels of trade-distorting domestic support”, and then “framed SSM and PSH as development issues to skirt existing limits,” and “created support among poorer Members for their own proposed exemptions that would benefit them as self-declared developing Members.” (para 4.13, page 12) (WTO, 2019c)

tribution as part of safety nets and targeted food programs, such as conditional cash transfers, nutritional programs for women and children, school lunches, food-for-work programs, and so on (type 2); and for price stabilization (type 3). Based on a country's conditions, emergency and food redistribution stocks (types 1 and 2) would help to achieve food security objectives, but the volumes for those purposes should not be unbound, both for operational reasons and fiscal costs. Also, if that food is procured domestically, even if purchased at market prices (which would place the scheme under the Green Box), those purchases, well-timed at harvest, will provide demand and price support for farmers.

A third issue is how a Member country using PSH would “ensure” that there are no trade distortions (e.g. displacing imports that would have happened in the absence of the program); that do not affect food security in other countries (Dorosh and Rashid, 2012, noted the spillover effects of subsidized wheat from India to Bangladesh); and that the products are not exported. A possibility discussed in Díaz-Bonilla 2017c is to monitor that prices are within the export and import parity purchase equivalents (or EPP and IPP).

A fourth point is what transparency requirements would be “onerous.” For instance, it could be argued that the information requirements for PSH in the Annex of the Ministerial Decision of December 2013⁸⁶ are a minimum of data that any country should want to collect to ensure accountability within its own government.

A final issue, which is not discussed in WTO, 2019a, is the type of remedies in cases of violation.

As I argued in other parts (Díaz-Bonilla, E. 2013; 2014; 2015; 2017a; 2017b; and 2017c, for developing countries, and if the objective is to help with food security, it is best to acquire those products at market prices (what places the PSH within the Green Box). If a developing country is buying food above market prices to provide farmers with high price support and selling below market prices to help poor and vulnerable populations, it will most likely get into severe fiscal problems and create economic crises that will affect the poor and the food insecure. Also, as noted, even if those programs buy at market prices, if the food is purchased domestically, they expand domestic food demand and support prices, as compared with the counterfactual that no such programs exist.

There are several other options for a “permanent solution” within the WTO negotiations (discussed in Díaz-Bonilla 2017b and 2017c and in Glauber, 2016), including:

- a) Clarify the link between “administered prices” and “market prices” and keep administered prices within the IPP-EPP band. Countries may be rebuttably presumed in compliance of not providing price support if, both administered prices track domestic market prices or, at least are below import parity prices and there are no exports

86. https://www.wto.org/english/thewto_e/minist_e/mc9_e/desci38_e.htm

from the PSH. If exports take place from PSH (directly or indirectly) (other than those that may be mandated by a global emergency as determined by the appropriate UN agencies), then the PSH would not be considered a “food security” stock, and the domestic support will have to be calculated according to current rules (possibly leading to challenges under the AoA if it exceeds the allowed limits) (Díaz-Bonilla 2017b and 2017c).

- b) Transform the interim solution into a permanent one under the AoA and extend it to all developing countries. Keep all the information requirements of the current “peace clause.” But, conceivably, if the PSH offers domestic support in excess of the country’s allowed limits, the practice may be challenged under the ASCM (Glauber, 2016).

The first one would force PSH to operate within their IPP-EPP band. The second one, would have some similar economic effects, to the extent that operating outside the IPP-EPP band could lead to challenges under the ASCM (in Díaz-Bonilla 2013, 2017b and 2017c, the country could also be challenged under the AoA).

Even if a permanent solution is found under the WTO legal framework, that would not necessarily be the main issue regarding whether the use of public food stocks is an appropriate approach to solve food security concerns in developing countries. Economic and operational considerations (discussed in greater detail in Díaz-Bonilla, 2017a) are more relevant for food security in poor countries than legal issues. The experience in developing countries with public food stocks to stabilize prices has been, with some exceptions, negative, leading to larger market volatility and/or macroeconomic instability due to fiscal problems. The problem of food price inflation and price extremes would be better managed by a combination of macroeconomic and investment policies, combined with safety nets that try to supplement the incomes of the poor. Along with the extension of safety nets for poor consumers, governments should also consider safety nets for poor and vulnerable agricultural producers; these safety nets could provide income support for poverty reasons, and may be scaled up in emergencies such as when harvests fail or in the case of sharp downward price spikes.

Another topic to be considered is that several studies have shown that increases in dietary diversity, not in calorie availability, are more closely related to declines in stunting and wasting in children and underweight in mothers. Thus, food security stocks based on a limited number of staple crops, usually selected only for their calorie content, may not be the best approach for tackling the multiple challenges of malnutrition.

Special Safeguard Mechanism (Ssm) for Developing Country Members

Safeguards, as trade constraints that countries can use (under some specific restrictions and compensations) to protect any productive sector when it is threatened by an unexpected surge in imports that can cause injury to that sector, operate under the Agreement on Safeguards of the WTO. Although the common safeguard is supposed to have general application, the Uruguay Round created another exception for agricultural products: the “Special Safeguard” (SSG) when countries have complied with the “tariffication” of previous non-tariff barriers.

Subsequently, during the Doha negotiations, some developing countries argued for a separate safeguard, which would allow them to raise tariffs temporarily in the event of damaging external shocks, as part of what was called a Food Security Box. This idea eventually evolved into what was called the Special Safeguard Mechanism, a version of which was included in the “Revised Draft Modalities for Agriculture” (WTO 2008). Disagreements about the product coverage and duration of the remedy was one of the main reasons for the breakdown of the negotiations in 2008. A number of food-importing developing countries continued to argue for an SSM at the WTO, while agricultural exporting countries (such as those in the Cairns Group) have argued that it would hinder the normal operation of trade.

During the 2015 Nairobi Ministerial meeting there was a decision committing WTO members to negotiate an SSM to be used for developing countries (WTO, 2015), and therefore, the issue has continued to be debated. A proposal (WTO, 2019a) indicates that the SSM ‘shall cover both price-based and volume-based triggers with no a priori product limitations as to its availability, and it shall be easily applied by developing countries, with flexible time limits for application to address the needs of the developing Member utilizing the mechanism.’ Finally, it says that the “operation of the SSM shall be carried out in a transparent manner, and the Member invoking the SSM should afford any interested Member the opportunity to consult with it in respect of the conditions of application of the measure,” but as before, asks that transparency requirements do “not impose onerous burden on developing countries and especially LDCs and NFIDCs” (WTO, 2019a).

In considering this and similar proposals for an SSM several points need to be noted.

Regarding the balance of interest in the negotiations, part of the problem is that, as noted, several developed WTO members have access to the SSG; therefore, it is understandable that many developing countries may want to make the situation symmetric and ask for a similar instrument for developing countries only. Yet, an alternative approach would be to eliminate the current SSG (which is used as a non-transparent mechanism of permanent protection for producers that are not necessarily poor; see Hallaert, 2005) and create a better safeguard more applicable to agricultural products and widely available to all WTO members.

In order to devise such new instrument, there are several economic and legal aspects to be considered.

In terms of public economic policies there are two questions to answered: First, what is the problem that the SSM is supposed to solve, and second, whether that is the best instrument to do so.

The most common problems cited are i) price volatility and ii) import surges, with the potential negative impact poverty and food security (see for instance WTO, 2017).

To place those issues in context, it is relevant to keep in mind the widely divergent size of average land holdings around the world (Díaz-Bonilla, 2015, cited also in WTO, 2017) and that this disparity is one of the structural problems that make agricultural negotiations so complex. Sometimes, countries that are considered “competitive” and with “large” producers present drastic trade liberalization proposals that do not take into account the problems of countries considered “less or un-competitive” with scores of “small farmers”. On the other hand, it is not uncommon for less competitive countries to advance protectionist trade policies that would hurt their own poor and vulnerable populations, even when asserting that the protection is needed to help the poor. It should be noted that with very few exceptions, the large majority of small-scale farmers are net food consumers; therefore, anything that keeps food prices artificially up would negatively affect the food consumption of the poor and vulnerable. Research shows that the application of an SSM-like safeguard to cereals in developing countries may in fact result in a decline in overall food consumption and employment in these countries (affecting food security) and they would also be worse off in terms of production and exports (Díaz-Bonilla, Diao, and Robinson 2006). In fact, a volume-based SSM has been estimated to increase poverty significantly (Ivanic, Maros; Martin, Will. 2014).

Regarding price volatility in world markets, some research (Anderson, Kym & Nelgen, Signe, 2012) shows that adjusting import tariffs and other trade measures in response to price volatility in world markets would actually lead to more volatility in those markets.

In fact, people often use the term “volatility” to refer to price levels as being “too high” or “too low,” which is different from prices actually being volatile (see a discussion in Díaz-Bonilla, 2016). For instance, in WTO (2017), the concern seems to be about future prices being potentially too low, thus harming the incomes of poor producers (even though this would help poor consumers). Of course, this is the traditional food price dilemma: governments are always pursuing the dream of “high” prices for producers and “low” prices for consumers. A single policy instrument (such as the SSM) would not solve this dilemma.

Whatever definition of price volatility is used, the implications for producers and consumers depend on much more than just international prices. Producer prices also depend on

the exchange rate, trade policies (import taxes, import quotas, and the like), marketing margins set by the traders and processors, transportation costs, and many other factors. IFPRI research (Minot, Nicholas. 2014) shows that volatility in domestic markets in countries in Africa south of the Sahara where governments intervened the most trying to stabilize prices was higher than volatility in international markets. Thus, government interventions in those countries appeared to be a more significant factor in domestic volatility than volatility in international markets. Other studies have pointed out that find that domestic macro-economic policies play a large role in domestic price volatility (Rashid and Lemma, 2011).

The second problem mentioned to support an SSM is also nuanced: import surges may be displacing domestic food production (the usual complaint), or those food imports may just complement national availability (particularly when there are declines in domestic production) (Díaz-Bonilla, 2015b). If trade is displacing domestic production one for one, presumably because of lower prices, and such production is based on small producers or generates negative employment effects among rural workers, there may be a decline in income opportunities among the rural poor, which would also hurt their access to food. In this line of argument, there would not be more availability (there is a one-for-one displacement), but the price of food would be lower. In that case, consumers may benefit, and particularly, the poorer ones for whom food is a large percentage of their expenditures, but rural producers and rural workers would suffer. Then overall poverty and food insecurity may increase as a whole if the aggregate benefits (over time) for poor and food-insecure consumers are lower than the aggregate losses for rural producers and workers. On the other hand, overall poverty and food insecurity may decrease if the benefits to the former are larger than the costs to the latter.

But it may also happen that the increased food imports are simply expanding and supplementing the availability of food without displacing domestic production (such as when there is a drought or other natural disaster), offering consumers additional supply that would not be available domestically. Therefore, the question regarding import surges is whether they lead to declines in domestic production, or it is the decline of domestic production that leads to import surges. In Díaz-Bonilla, 2015b several tests of causality are implemented and they indicate that it is changes in domestic production that lead to changes in trade, for both agricultural and food products in LDCs and LIFDCs, while the reverse causality, from imports to production, is not supported by the data⁸⁷. This finding is compatible with the view that trade has a stabilizing effect in LDCs and LIFDCs: if production declines due to exogenous shocks, then countries utilize more imports to stabilize domestic consumption, while if the production increases because of very good weather or some other nontrade causes, then imports decline.

Therefore, if the concern is for poor and vulnerable populations, focusing on only one factor (prices being too high or too low) and on only one instrument (the SSM,

87. In the case of NFIDCs, the tests cannot reject the null hypothesis of no causality in either direction: production is not affecting imports as in the other two cases, nor are imports displacing production, as claimed by the critics of expanded trade.

for instance) is too narrow a policy and will most likely be ineffective. It would be far more productive for trade negotiators to dedicate more time to address the specific challenges faced by poor and vulnerable populations through properly designed and funded safety nets. To dismiss this option with the argument that “it costs money” ignores the fact that protection also costs money, being a tax equivalent privately collected by producers (particularly the larger ones) and paid for by consumers (with larger negative impacts on poorer consumers) (Díaz-Bonilla, E., Xinshen Diao and Sherman Robinson (2006))

Also, it would be more appropriate, both for poor and vulnerable populations and for the international trading system in general, if the current special safeguard, which has been used as a non-transparent mechanism of permanent protection for producers (and not necessarily poor producers), were to be eliminated and replaced with a better and generally available safeguard for agricultural products. That new temporary safeguard would not require compensation as the current SSG; but 1) the only instrument would be an additional tariff calculated *ad valorem*, applied on a non-discriminatory basis (i.e. no quantitative restrictions); 2) it will only be used as a temporary device when large and sudden shocks happen and the number of successive years or marketing periods when the safeguard is used should be limited; and 3) the transparency requirements, such as those for the current SSG, but that are not followed, must be enforced (Hallaert, 2005). Finally, it may be defined that it can only be invoked when there is a damaging import surge as determined by an international organization, not by individual countries.

More importantly, it would be crucial to have more effective safety net programs for the poor. Safety nets have the advantage of focusing directly on the problem that is supposed to be addressed (poverty, in this case). In this regard, it would be useful for policies in the WTO Green Box aimed at the provision of public goods (e.g. agricultural research) to be separated from measures targeted at decoupled income support; and within the latter group, there also needs to be a further distinction between income payments to farmers in general (which should be capped under WTO rules) and poverty-focused safety nets (which should not be capped).

State Trading Enterprises (STEs)

Several WTO Members, both developed and developing, operate a variety of STEs with international trading activities, particularly in agriculture. STEs can influence domestic production, as well as import and export activities. The recognition of this fact led to the consideration in GATT’s Article XVII of STEs: they were accepted under the trade regime provided they acted in accordance with the general principles of nondiscrimination and

based their decisions on commercial considerations⁸⁸. Also, STEs should not diminish or nullify the commercial value of negotiated tariff concessions and should not be operated in a way that creates quantitative restrictions on imports, export subsidies, and other WTO–inconsistent measures. Also, governments had to notify GATT about the operations of their STEs on a regular basis.

However, the original GATT did not define state trading enterprises, and this created a variety of interpretations. With the Uruguay Round and the creation of the WTO, the agreements included an “Understanding on the Interpretation of Article XVII,” which presented the following definition: “Governmental and non-governmental enterprises, including marketing boards, which have been granted exclusive or special rights or privileges, including statutory or constitutional powers, in the exercise of which they influence through their purchases or sales the level or direction of imports or exports.”

This clarification changed somewhat the original meaning: while before an STE was a “state enterprise,” or one receiving exclusive rights or privileges, the new definition required notifications in the case of “Governmental and non-governmental enterprises, including marketing boards, which have been granted exclusive or special rights or privileges” (emphasis added) that could, when exercised, influence “the level or direction of imports or exports.” Therefore, the “or” of the original article was replaced by “which,” excluding government-owned companies that are not granted those special privileges, even though by their operation they may influence imports and/or exports.

A variety of developed and developing countries notify the operation of STEs to WTO (see for instance WTO, 2019d and apparently, a larger percent of the STEs notified are in agriculture (WTO, 2019e). But the notifications focus on exporting STEs, as part of the disciplines on export competition (see Díaz-Bonilla and Harris, 2014). Consequently, information on agricultural importing STEs is not considered (except in the case of some STEs which have exporting and importing powers, such as China National Cereals, Oil and Foodstuff Import and Export Co renamed COFCO in 2007).

There are different views on the impact of STEs, which also depend on the powers and operations of the STEs. On the one hand, some argue that the exclusive or special privileges allow STEs to exercise domestic monopoly or monopsony powers, distorting domestic and international markets and evading international obligations. On the other hand, it has been argued that STEs, mainly in developing countries, contribute to more stable supply and prices, thus helping with food security. Also, they may perform other functions such as support for rural development and operate subsidized food distribution schemes to help

88. However, given that STEs may have different objectives than commercial firms and were created with those separate objectives in mind, the debate about what it means to base their operations on commercial considerations alone has led to some debates. The United States brought a case within the dispute settlement of the WTO against the Canadian Wheat Board with the argument that the regime under which that STE operated violated the notion of commercial behavior. The panel and Appellate Body found that the primary discipline of the WTO regarding state trading enterprises was nondiscrimination; operating under “commercial considerations” was not an independent obligation, but the potentially noncommercial nature of some operations could be used as a test of discrimination (see Hoekman and Trachtman 2007).

the poor and vulnerable (McCorrison and MacLaren 2006). However, the track record of the STEs in developing countries has been varied, with some successes but also significant failures (see, for instance, Kherallah et al. 2002 on SSA).

As indicated, the market impacts of STEs are related to the objectives pursued, the type and number of products covered, the operations allowed, and the general legal powers bestowed on them, and the market structure in which they operate, both domestically and internationally. The debate has been on whether the main problems for international trade are exporting STEs (where developed countries such as Canada and Australia have been the main examples until recently), importing STEs (including countries such as Japan and China), or both. In fact, there is a variety of activities that can influence trade in ways that may affect the interests of producers and consumers, both in the country owning the STE and in other countries that may compete with that enterprise on the import or export side. The question then would not be the existence of STEs per se, but specific practices, such as import restrictions and export subsidies that are disciplined in general by the WTO legal framework. In that regard, the issue of notifications and transparency becomes central: it is certainly not the same to operate price support schemes for domestic production through different price schemes or the monopoly on imports and/or exports, than do more neutral activities such as quality control of domestic production, the provision of export-related support services such as storage, shipping, handling, processing, and packaging, or the operation of emergency stocks of key staples (Ingco and Ng 1998).

Therefore, it is important to continue the work to improve the frequency and detail of the notifications to the WTO's Working Party on STEs, which focuses on exports. But the operations of importing STEs need to be monitored as well: for instance, McCorrison and MacLaren (2006) show that in the case of rice in Korea, the operations of the STE implied an ad valorem tariff equivalent of 178 percent and a producer subsidy of 25 percent. Also, STEs seem to have a negative impact on the full use of TRQs (i.e. a highest participation of STEs in the TRQ of a specific product was correlated with lowest percentage of fill) (WTO, 2020).

In developing countries, the creation of STEs is also related to two opposite assumptions: one is that the private sector is too weak to adequately serve producers and consumers (therefore, STE are supposed to fill that vacuum); the other is that, contrary to the first one, the private sector is too strong and has the market power to extract unjustified rents from producers and/or consumers (there STEs act as a countervailing market power).

However, regarding the first point, the expansion of the private sector in developing countries is evolving along with general economic development and the expansion of infrastructure, with important changes in the processing, wholesale, and retailing sectors taking place in many developing countries. Then the question of whether the government or the private sector is better equipped to handle the trading functions (on products and

inputs) becomes an empirical issue. In several developing countries where the STEs have had exclusive legal powers to operate in markets, the legal framework has been changing toward one in which the private sector has increasingly more participation.

Regarding the concerns about the exercise of monopoly/monopsony power by private operators, the main issue, if such a problem exists, is to understand the causes. One reason for private monopolies to exist in food products may be a public policy that, directly or indirectly, grants such powers to private firms (such as discretionary import licenses or domestic trade licenses and restrictions: i.e. a policy-induced market imperfection). On the other hand, if the monopoly (or monopsony) power has its origin in market imperfections, then the persistence of the problem may exist because the government is failing to implement adequate regulatory approaches to eliminate abuses. Therefore, a better approach would be to eliminate the policy-induced monopoly/monopsony in the first case or to establish adequate anticompetitive regimes in the second, rather than trying to establish an STE to counterbalance the potential abuses of the private sector, which may lead to larger costs than the perceived lack of market competition. In any case, the possibility of abuse of market position by private sector operators must be compared to the possibility of inefficiency, corruption, and abuse by the public staff operating governmental schemes (Díaz-Bonilla 2014).

A final argument for STEs in developing countries is that they perform development and poverty alleviation functions. Some studies have shown that in Africa, the elimination of marketing boards, which in many cases taxed producers and generated significant fiscal costs, may have led in the short term to less use of fertilizers and reduction of credit (Kherallah et al. 2002), but the medium-term impact may have been to open space for the subsequent development of private sector operators. In Latin America, economic reforms were generally more radical, and the number related to STEs has declined significantly, with the private sector taking up the productive functions and governments implementing new types of public safety nets (such as conditional cash transfers) focusing on the poor and vulnerable. In Asia, on the other hand, STEs are still present, although they may have been operating with some reductions in their public monopoly powers.

Again, the argument that in developing countries there are market failures in the provision of agricultural inputs, credit, insurance, and marketing services that may justify for some types of STEs, must be compared to the possibility of government failures in running those schemes. The relevant question is whether or not STEs are the best policy instrument for achieving rural development and poverty alleviation objectives. The fiscal implications of the different approaches must be considered as well, given the important impact on public deficits that some schemes based on STEs have had in the past and the potentially better alternative uses of scarce public funds.

Regarding the WTO, at the very minimum, stricter requirements of transparency and timely communication will be necessary for STEs both on the export but also on the import side (Díaz-Bonilla and Harris, 2014, and Díaz-Bonilla and Hepburn, 2016).

Conclusion

This chapter has discussed three trade topics for which food security concerns have been mentioned as the rationale (or at least part of it) for their inclusion in the WTO negotiations use: PSH, SSM and STEs. Different economic and legal issues were discussed, trying to compare those and other options to achieve the desired food security objectives.

It can be argued that monetary, fiscal, and exchange rate policies have more impact on food security than trade, to the extent that they exercise a greater influence on growth, employment generation, external competitiveness, inflation, and the possibility of crises. However, the public debate (with strong participation from global civil society) seems to have focused on the effects of trade on food security, and on some interventions, such as the ones discussed here, which may or may not be the best options to address food security concerns and poverty alleviation. In any case, they may blunt instruments that do not solve the traditional food policy dilemma of trying to support higher prices to help poor producers or lower prices to help poor consumers (Díaz-Bonilla, 2015).

The best way to address that dilemma is through strengthened safety nets for the poor and vulnerable, which operate on the demand side, along with supply-side measures that should include aspects such as:

- support for land and water ownership by small producers and landless workers;
- investments in human capital, infrastructure, climate change adaptation and mitigation, and agricultural R&D⁸⁹;
- appropriate management of natural resources;
- women's empowerment programmes;
- community organization and participation, particularly for the poor and vulnerable;
- adequate functioning of product and factor markets, curbing abuses of dominant market positions;
- macroeconomic stability, including the avoidance of overvalued exchange rates;
- elimination of institutional, political and social biases that discriminate against vulnerable groups; and

89. These policies would be in line with target SDG 2.a that calls for increases in investments “in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.”

- overall good governance, including strong efforts to reduce corruption and ensure public safety and peace.

Concerns about the increasing problem of obesity and related non-communicable diseases, such as diabetes and cardiovascular problems, may require stronger policies related to food labelling, and the use of regulations and taxes to reduce the production and consumption of unhealthy foods.

WTO negotiations should ensure that the policy space related to those instruments is maintained.

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Other topics relevant for Agriculture and the WTO

Promoting Transparency on Agricultural Policies at the WTO: Lessons from Latin America and the Caribbean

Adriana García Vargas⁹⁰

Introduction

Transparency is present across all three pillars of the WTO Agriculture negotiations, with many technical submissions and proposals by WTO members that either address transparency exclusively, or include related elements within the areas they cover⁹¹. The suggestions range from improving the implementation of the notification requirements established by the Agreement on Agriculture (AoA), to creating new notification requirements or modifying the existing ones.

Monitoring compliance with the rules based on the notifications is a central task of the WTO Committee on Agriculture (CoA), as part of its mandate to oversee the implementation of the AoA. The information that members notify is also the basis for the discussion of agricultural policies in this body's regular meetings. For this reason, the CoA often discusses the problems associated with missing or overdue notifications, and the WTO Secretariat has developed several tools to assist members in preparing and submitting their notifications, and to support the monitoring of the notified information. These include technical

90. The author would like to thank Roy Santana and Lars Brink for their insightful comments on previous drafts of this chapter.

91. See for example the 2019 and 2020 submissions by the United States concerning transparency in domestic support (JOB/AG/181), by the Russian Federation about transparency in applied tariffs (JOB/AG/138 and JOB/AG/186), by Australia and Canada on the notification of tariff rate changes (JOB/AG/168 and JOB/AG/185), by Canada, Norway and Switzerland on transparency in the export competition pillar (JOB/AG/170) and by Japan and others on the notification of export restrictions (JOB/AG/175). Elements of transparency related to domestic support measures were also included in submissions by the African Group (JOB/AG/173) and by a subset of Cairns Group members (JOB/AG/177).

assistance activities, online training modules, periodic reports about members' compliance with notification obligations, and the development of an online platform to submit questions and retrieve and analyze notified information⁹², among others.

Measuring the relative degree of transparency that has been achieved so far through the notifications, and the success of the above-mentioned activities, would require an examination of at least two dimensions: (i) the “timeliness” of the notifications (i.e., whether they have been submitted within the established deadlines), and (ii) the “completeness” of the information, which includes both quantitative (i.e., whether all the notifications required were presented) and qualitative (i.e., whether the full information was provided) aspects.

The reports that are prepared for the CoA tend to focus on the quantitative aspect: whether or not the notifications required for a particular year have been submitted. Against this variable, the efforts have had some success: as of early September 2021, WTO members have presented over 5,400 notifications. The number of submissions has also increased, with 2019 being the year with the highest number of notifications (440) submitted since the inception of the Committee. However, there is still much work to be done: almost 2,000 notifications –or about 24% of those due by end-2019– remain outstanding. Particularly worrying is the fact that an important number of members have never notified in some of the areas required: 28 members have not presented a single domestic support notification, and 20 have never presented an export subsidy notification, not even a “nil statement” indicating that such measures were not used.

Some members have stepped in to fill the gaps by submitting “counter-notifications”. While this instrument has been available since the entry into force of the AoA⁹⁴, it was not used before May 2018. To date, five counter-notifications⁹⁵ have been presented. In them, members have either included policies that they believe another member should have notified, or provided alternative calculations or additional information that they believe was missing from the other member’s notifications.

In addition to being an international legal obligation, notifications are a key element for the oversight function of the CoA and, more generally, for the well-functioning of the multilateral trading system. If members do not notify their agricultural policies, if the data they present is incomplete or outdated, or is shared after it is no longer relevant, it becomes more difficult for the WTO membership to have the necessary information to monitor compliance with the AoA and to assess progress towards its objectives. Transparency also

93. The Agriculture Information Management System (AGIMS), see <https://agims.wto.org/>

94. Article 18.7: “Any Member may bring to the attention of the Committee on Agriculture any measure which it considers ought to have been notified by another Member.”

95. The first four counter-notifications submitted so far concern India’s domestic support policies for wheat, rice, cotton, sugar and pulses. They have been presented by Australia, Canada and/or the United States. In June 2019 Indonesia submitted a fifth counter-notification of safeguard measures invoked by the Philippines on instant coffee and coffee extracts.

contributes to the well-functioning of agricultural trade, as it helps reduce information asymmetries between trading partners. Particularly for developing countries –which not always have the capacity to adequately follow up the developments in international markets– the information available through the WTO can be a useful tool to learn about agricultural policies and understand their potential impact.

The COVID-19 pandemic has brought enormous challenges for the global economy, and has highlighted the importance of trade to ensure that global food supply chains are not disrupted. According to a WTO information note⁹⁶, governments have taken two types of measures in response to the pandemic. A first category includes measures applied as an initial crisis response to contain the spread of the virus and guarantee food availability. This includes trade-facilitating measures (such as temporary tariff reductions and flexibilities in customs procedures) but also many restrictions and prohibitions on the export of food products. A second category of COVID response measures are those intended to help farmers cope with the impact of the crisis and mend the disrupted supply chains. They include important economic stimulus packages, as well as different types of support to agricultural producers and exporters.

Given the potential effect of many of these measures on agricultural trade and international food markets, it is no surprise that the opportunity to discuss them at the WTO generated unprecedented interest: the first CoA meetings held in 2020 (when work was resumed after the pandemic-related suspension) saw a record number of questions posed by members concerning others' farm policies⁹⁷.

As governments across the world continue to apply different measures to mitigate the impact of COVID-19, information becomes an even more valuable public good, and the importance of transparency at the WTO becomes even more evident.

The Study

Since 2010, IICA has the status of observer organization to the CoA. In this framework, it works to support Latin American and Caribbean countries through a number of technical cooperation activities. As part of these efforts, IICA conducted a study to help improve the understanding of questions related to transparency and assist its member countries in meeting their WTO transparency obligations. The study aimed to find out the extent to which countries are meeting their agriculture notification requirements, determine the factors that are contributing to a good compliance record or the challenges that might be hindering compliance, and suggest actions to address the problems identified.

96. "COVID-19 and Agriculture: A Story of Resilience" published on 26 August 2020.

97. The AGIMS [consulted on 22 September 2021] records 315 questions posed for the CoA formal meeting held on 28 July 2020. Members also submitted 59 questions for a special CoA meeting (held on 18 June) that focused on the COVID-19 response. As a comparison, the maximum number of questions presented for a single CoA meeting in 2019 was 208.

Country Coverage

The analysis covered the Latin American and Caribbean countries that are members of the WTO, grouped in five regions⁹⁸. This represents a very diverse group of countries, with surface areas that span from less than 1,000 to 8.5 million square kilometers, and with agricultural land covering a percentage as low as 0.5% and as high as 80% of their land area. Their population sizes range from 53,000 (St. Kitts and Nevis) to over 200 million (Brazil), and the share of employment in agriculture ranges from 0.1% (Argentina) to over 30% of their total employment (Bolivia, Guatemala, or Nicaragua)⁹⁹.

The same diversity can be observed regarding the relative weight of agriculture in foreign trade. Agricultural exports make up from about two percent to over two thirds of the total exports of goods per country. On average, agricultural goods as a percentage of total goods exports represent 27% for the Andean countries, 19% for the Caribbean, 42% in the case of Central America, 9% for North American, and 51% for South American countries. 16 of the 31 countries covered are net importers of agricultural goods¹⁰⁰.

Many countries show a predominance of services over goods in their exports. This is particularly true for the Caribbean region: in all but five of the 13 countries, services represented more than half of total exports; in some cases, the value of services exported represented up to 10 times the value of goods exported. Services also have a relatively high weight in the total exports of the Central American countries. On the other hand, even though almost all Andean and Northern countries are net agricultural exporters, industrial goods dominate both regions' exports, while the share of agriculture is relatively low. In the Southern region, while industrial goods also have the largest share, the value of agricultural exports represents almost three times the value of exports of services.

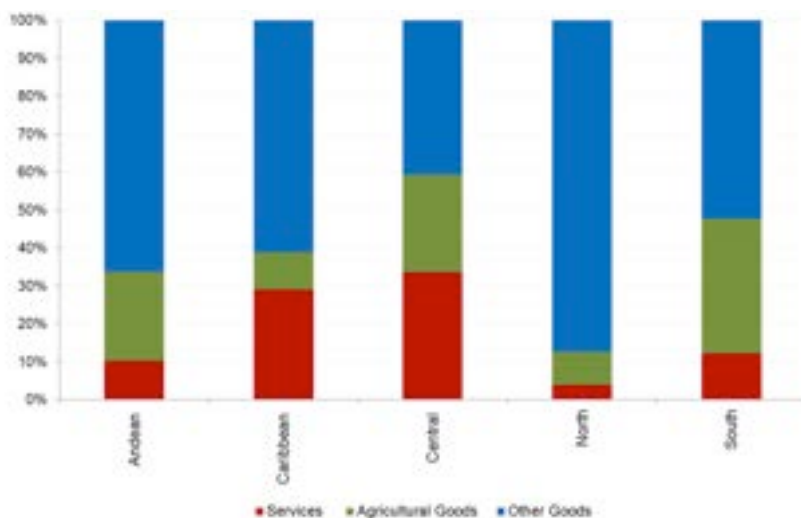
98. The regions are composed as follows: Andean (Bolivia, Colombia, Ecuador, Peru, Venezuela), Caribbean (Antigua and Barbuda, Dominica, Barbados, Grenada, Guyana, Haiti, Jamaica, Dominican Republic, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago), Central (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama), North (Mexico), and South (Argentina, Brazil, Chile, Paraguay, Uruguay).

99. All figures mentioned in this paragraph are from the World Bank's World Development Indicators database [last consulted on 22 September 2021].

100. All trade figures used in this chapter come from ITC's Trade Map [last consulted on 22 September 2021]. With very few exceptions, the data presented is for 2020. In some cases this source reports mirror data for trade in goods, or estimations of trade in services. Exports of agricultural products were calculated using a simplified version of the AoA Annex 1 definition.

Figure 1

Latin American and Caribbean Countries: Exports by Sector and Region 2020



Source: Own calculations based on data from ITC TradeMap.

Compliance with Notification Requirements

There are 12 distinct notification requirements in the area of agriculture. Some notifications must be submitted annually, while others are due only if a measure is introduced or modified. In addition, some of the obligations apply only to subgroups of WTO members –depending on the commitments that they undertook in the Uruguay Round or upon their accession to the WTO– while others apply to all members.

Table 1

WTO Notification Requirements in the Area of Agriculture

Area	Notification	Frequency	Applicable to
Market Access	MA:1 - Tariff quota administration	One-off notification of scheduled TRQs Ad hoc (when changes to the administration are introduced)	41 members with tariff and other quota commitments
	MA:2 - Imports under scheduled TRQs	Annual	
	MA:3 - Special safeguard: volume-based	Ad hoc (only if safeguard is invoked)	33 members who reserved the right to use the Special Safeguard
	MA:4 - Special safeguard: price-based	Ad hoc (only if safeguard is invoked)	
	MA:5 - Annual summary of special safeguard actions	Annual (even if no safeguard was invoked)	
Domestic Support	DS:1 - Current total Aggregate Measurement of Support	Annual (even if no support was provided) Exception: LDCs (every 2 years)	All members
	DS:2 - New or modified measures exempt from reduction	Ad hoc (only if a new measure is introduced or an existing one is modified)	All members
Export Subsidies	ES:1 - Budgetary outlay and quantity reduction commitments	Annual (even if no support was provided)	All members
	ES:2 - Total exports	Annual	29 members with export subsidy reduction commitments or designated as "significant exporters" in document G/AG/2/Add.1
	ES:3 - Total volume of food aid	Annual	Members that are food aid donors
Export prohibitions and restrictions	ER:1 - Notification under Article 12 of the AoA	Ad hoc (only if measures are applied)	All members
Follow-up to the Marrakesh Decision on LDCs and NFIDCS	NF:1 - Notification under Article 16:2 of the AoA	Annual	Members that are food aid donors or provide technical and financial assistance

Source: Own compilation based on the WTO's Handbook on Notification Requirements under the AoA.

The study focused on the following five annual notification requirements: Table DS:1 and Table ES:1 (which must be presented by all the countries covered); and Table MA:2, Table MA:5 and Table ES:2 (applicable to subsets of countries).

Table 2 shows the average compliance rates in Latin America and the Caribbean for each of the five notification requirements. In general, compliance with the requirements that are applicable to a smaller group of countries –13 in the case of tariff quotas, 11 for the special safeguard and 9 for total exports– is better than in the case of the requirements on domestic support and export subsidies, which should be met by all WTO members. While many countries are fully up to date with their notifications, or are due only the most recent 1-2 years, there are also several with significant gaps, and even some that have never notified, particularly in the Caribbean region.

Table 2

Latin American and Caribbean Countries: Average Compliance Rates^{1/} (%) by Region and Notification Requirement 1995-2019

Notification	All	Andean	Caribbean	Central	North	South
Imports under TRQs (Table MA:2)	90.5	84.0	62.0	100.0	100.0	100.0
Special Safeguard (Table MA:5)	89.8	70.7	76.0	100.0	100.0	100.0
Domestic Support (Table DS:1)	65.5	80.8	38.5	78.9	96.0	95.2
Export Subsidies (Table ES:1)	70.4	80.0	45.5	84.6	100.0	100.0
Total Exports (Table ES:2) ^{2/}	90.7	58.0	n/a	100.0	100.0	100.0

Source: Own calculations based on data from the WTO Secretariat as of 7 September 2021.

1/Number of notifications submitted / number of notifications due in the given period.

2/This requirement applies only to nine of the covered countries, none of them from the Caribbean region.

The Survey

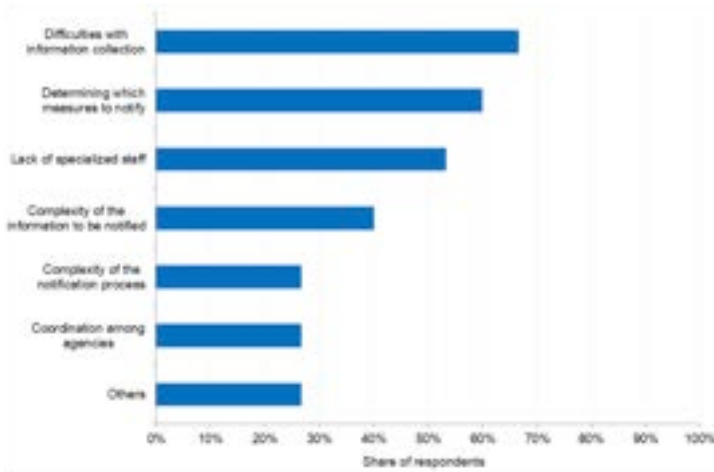
The study relied on a survey applied to government officials, as well as on a review of literature and the analysis of trade and other relevant data. The survey covered aspects such as the number and role of agencies involved in the process of preparing and submitting the notifications, the challenges that countries have faced in complying with their obligations or the factors that have contributed to a high compliance rate, and the difficulties faced in meeting specific notification requirements. Respondents were also asked to indicate actions that could help their countries improve in meeting these obligations in a timely manner and with quality. The survey was responded by fifteen Latin American and Caribbean countries.

Based on the survey responses and the other information examined, the study identified several types of challenges that LAC countries face in the notification of their agricultural policies. Figure 2 summarizes the difficulties pointed out by the survey respondents. They include problems in collecting the necessary information, technical capacity issues such as difficulties to analyze complex information or to determine which measures should be notified, and institutional capacity problems such as a lack of specialized staff. Most survey respondents indicated that at least two separate agencies participate in the preparation of their country's notifications, and in some cases inter-agency coordination was specifically identified as a problem.

Some answers also pointed to a certain lack of willingness to notify, which suggests that some authorities may fear taking certain decisions due to a lack of knowledge of the implications. Such fears might be rooted in the inherent political sensitivity of the agricultural sector, or in a reluctance to expose domestic policies to international scrutiny or even to a potential challenge in dispute settlement. This further suggests that additional actions may be required to provide comfort to the notifying countries in order to remove taboos and negative perceptions associated with notifying to the WTO.

Figure 2

***Latin American and Caribbean Countries:
Main Difficulties Faced in Meeting Notification Requirements***



Source: Responses to the survey.

Respondents from countries that have a good compliance record believe that inter-agency coordination and technical assistance were essential to achieve this. They also highlighted the importance of having a commitment with the WTO from the authorities at the highest level, as well as the technical knowledge of the officials in charge of the notifications.

Six of the survey respondents pointed out that the notification of domestic support measures is particularly difficult to prepare, while others indicated having difficulties in notifying special safeguards, export subsidies, and tariff rate quotas. An important point to note is that some answers evidenced a certain lack of clarity by the responding persons regarding which specific notification requirements apply to their country.

Most countries have benefitted from technical assistance in the area of notification. In some cases, the respondents highlighted how this support has been critical to solve major delays and to get back on track. Credit was also given to the assistance of the WTO Secretariat to clarify specific questions and review the notifications before they are circulated. Some answers highlighted how the practical experience gained by preparing the notifications had helped officials complement the knowledge obtained from the technical assistance activities. Others also mentioned that it would be a good idea to promote knowledge and experience-sharing among countries.

However, the delivery of technical assistance not always translates into an improvement of the country's compliance record. This may be explained by different reasons, a main one being that the officials designated by the country to participate in the capacity-building activities are not necessarily those directly responsible for the information that must be notified, or belong to an agency that does not have the information. Two survey respondents mentioned the importance of directly training the officials in charge of Agriculture, in order for them to learn to provide the information as required by the WTO.

Lessons and Opportunities

The study identified four areas in which there is a potential for work from domestic, regional, and international actors to help LAC countries –and, more generally, developing countries– improve in meeting their notification requirements.

Strengthening Institutional Capacity

Given that most countries involve several agencies in the preparation of notifications, it is important that the work flows smoothly and that good communication and collaboration are developed among them.

Examples of measures that could help improve in this area include: establishing inter-agency working groups or networks, which could have varying degrees of formality (from an informal network of experts from all agencies involved to an official committee with a specific meeting schedule); creating units or departments specifically in charge of

agricultural notifications; defining clear working procedures and lines of responsibility; preparing information notes or procedure manuals; promoting archiving practices that preserve institutional memory; or developing computer tools that help prepare the notifications (for example, a template to fill in and calculate the domestic support information).

Since countries are organized in different ways, and their domestic agencies have different competences and levels of oversight on the specific topics, it would correspond to each one to find the solution that best adjusts to its structure. However, there is considerable room in this area for the sharing of experiences and best practices among countries.

Strengthening Technical Capacity

Regular capacity-building is clearly important to improve the officials' technical knowledge and avoid problems associated with staff turnover. The needs for technical assistance vary according to each country's capacity, and to aspects such as the specific agricultural policies used, the size and structure of the agricultural sector, and the domestic institutional organization. Training activities should thus be customized to the countries' specific needs and contexts, and they should also reach the appropriate government officials.

As noted earlier, a number of countries are in the special situation of never having presented an agriculture notification. Perhaps an impulse to take the first steps is needed in these cases. There might be a lack of knowledge about what needs to be done and which government agencies are responsible of which tasks; special assistance might be needed to "break the ice" and make an initial effort.

While the study did not delve into the quality of the information that has been notified, this aspect also needs to be kept in mind and at the center of any technical assistance efforts.

Collaborative Networks and Information-Sharing

Another finding is that there is an important potential for countries to work together in Geneva and through regional networks. Some of the survey responses highlighted that countries can join efforts to analyze and understand agricultural policies and their impact, which can also help them better prepare for the CoA discussions. This can be particularly helpful for countries that have smaller delegations in Geneva and fewer resources. There could be value in exploring the potential of sharing experiences also at the regional level; for example, the measures that countries have implemented to streamline their notification process or to solve delays.

Involvement of Capital-Based Experts

The lack of financial resources often prevents developing countries from bringing experts from their capitals to CoA meetings in Geneva, and thus from having their capital-based authorities participate actively and get directly involved in the monitoring of

members' agricultural policies. This keeps those experts that work in the design, implementation and notification of agricultural policies from having a greater awareness about the topics discussed in the WTO and about the importance of the notifications. It would also be useful to explore ways in which financial support for this purpose can be provided.

As a consequence of the COVID-19 pandemic, many organizations –including the WTO– had to explore alternatives to in-person meetings in order to keep their work going. This has resulted in a greater openness to holding virtual meetings. The virtual participation of capital-based experts could also be a practical way to overcome this challenge.

Final Comments

In all four areas there are opportunities for support from international and regional organizations, and for collaboration and knowledge-sharing among countries. The survey identified cases of countries that undertook significant efforts to get up to date with their notifications, and of countries that developed internal mechanisms to improve their notifications and to better monitor other members' policies. It could be valuable to share these experiences, identify best practices, and also discuss the obstacles found in these processes and how they were addressed.

The study also highlighted the value of learning by doing: as officials prepare the notifications and work in answering questions about them, they develop their analytical capabilities and learn to identify which aspects to search for when examining the notifications of other countries. This can empower the country to take a more active role in the CoA discussions, and to also present questions to others about their policies.

It is also important to raise awareness among government officials about the benefits of transparency at the WTO. The notifications, and their discussion by the CoA, should not be seen only as additional work to meet a legal obligation, but rather as a valuable source of information that is a public good available to all WTO members regardless of their size or capacity. Recognizing this could help developing countries gain a sense of ownership of the Committee's work and encourage a more active participation in the discussion of agricultural policies. It is also important to counter the above-mentioned fears and misconceptions about sharing information at the WTO.

Looking at the extensive trade and economic policy responses to COVID-19, it becomes even more important to ensure that countries keep to their WTO commitments, and to monitor the use of measures that can affect agricultural markets, such as export restrictions on foodstuffs or potential increases in trade-distorting domestic subsidies. Furthermore, it becomes clearer that following the developments in agricultural markets is not only in the interest of agricultural exporters: on the contrary, the events and policies that could affect world prices or generate volatility are particularly relevant to countries that are net food importers, and in general to all developing countries, regardless of the relative importance that agriculture has in their economy.



Impacts of Agricultural Producer Support on Climate and Nutrition Outcomes with Special Emphasis on Latin America and the Caribbean

Joseph Glauber David Laborde and Valeria Piñeiro¹⁰¹

Introduction

Despite significant reforms over the past 25 years, the agricultural sector remains highly subsidized. Agricultural producer support is projected to reach almost USD 1.8 trillion in 2030 (FAO/UNDP/UNEP 2021). About 73 percent of this (USD 1.3 trillion) is projected to be in the form of border measures, which affect trade and domestic market prices. The remaining 27 percent (USD 475 billion) is projected to be in the form of fiscal subsidies to agricultural producers. About two thirds of the total producer support (USD 1.2 trillion) is estimated to support crop production while one third (USD 595 billion) is expected to go to livestock producers.

It has been long recognized that agricultural producer support measures, especially price incentives and coupled subsidies, can greatly distort producer planting decisions, the type and use of production inputs, and trade and marketing decisions. What is less well understood is how those decisions can have adverse impacts on the environment, climate, nutrition and food security and health.

This chapter examines the impact of agricultural producer support on climate and nutrition with particular focus on Latin America and the Caribbean (LAC). It draws on recent analytical work prepared for the FAO/UNDP/UNEP report “A Multi-Billion Dollar Opportunity—Repurposing Agricultural Support to Transform Food Systems” (FAO/UNDP/UNEP 2021)¹⁰². LAC countries are particularly of interest because while they account for almost 11 percent of total agricultural production and 10 percent of total

101. This article was undertaken as part of the CGIAR Research Program on Policies, Institutions, and Markets (PIM) led by the International Food Policy Research Institute (IFPRI). Funding support for this study was provided by the CGIAR Research Program on Policies, Institutions, and Markets.

102. The analytical results are based on the global computable general equilibrium modelling framework described in Laborde et al. (2020) of which further details are presented in Annex 2 of the FAO/UNDP/UNEP (2021) report.

trade (FAO 2021), they currently account for just 4 percent of total agricultural support (FAO/UNDP/UNEP 2021). Because of this, the impacts of removing agricultural support outside of LAC countries can have significant impacts on the region through its impact on foreign production, trade and prices.

Impact of removing agricultural support on the agricultural sector

Our analysis considers three alternative scenarios. The first scenario considers the removal of all border measures, including tariffs and other restrictions that provide price support to domestic producers by making foreign imports more costly¹⁰³. The second scenario examines the removal of all fiscal subsidies, which support producers through transfer payments, sometimes tied to production or input use, or through more decoupled forms of fiscal support where payments are tied to factors of production, such as land. The third scenario examines the impact of removing both border measures and all fiscal subsidies. The results are highly dependent on their underlying assumptions and are best interpreted as indicative of the likely effects, in a relative rather than absolute sense. In the presentation that follows, the emphasis is on the direction and relative magnitude of a given effect rather than the actual magnitude.

Border measures have markedly different impacts on the farm sector compared to fiscal subsidies. Border measures such as import tariffs and duties insulate domestic producers from world prices and competing foreign suppliers. Measures such as tariffs raise the prices for consumers either directly, through consumer-ready food like fruits and vegetables, or indirectly, through higher input prices for feedstuffs and foodstuffs like cereals or oilseeds, which raise the production costs of more processed foods such as meat or bread¹⁰⁴. Because border measures have negative effects on trade, world prices tend to be lower, as global suppliers have fewer export markets in which to sell their goods (OECD, 2016).

The impact of fiscal subsidies is more indirect. They typically increase producer returns without having direct impacts on market prices. If such measures are tied to production, they will tend to encourage more production of that commodity, or if tied to inputs such as fertilizers or seeds, such measures can result in higher yields and production. Producers gain through higher returns (with lower market prices offset by subsidies) while consumers gain through lower market prices, with the costs largely borne by the government. Where support is decoupled, this can have marginal impacts

103. Border measures also include export taxes and duties, though they are far smaller in magnitude than import tariffs.

104. Likewise, export taxes and duties tend to decrease domestic prices by making prices more expensive for foreign buyers. Export taxes and duties are relatively small in magnitude compared to import tariffs but their impact on a given commodity (for example, wheat) may be quite large, particularly when global supplies are tight.

on agricultural production, but may ultimately distort factor prices (for example, land values and rents for capital) as transfer payments from taxpayers to farmers are capitalized into asset values.

Table 1 shows the impact of the removal of agricultural support on crop and livestock production. Globally, the removal of all border measures is estimated to increase global crop production by 0.22 percent and livestock production by 0.21 percent relative to the 2030 baseline levels. Of interest is the regional shifts in production. Livestock production declines in developing countries while increasing in developed country while crop production declines in developed countries and increases in developing countries. Crop production increases in most of the LAC region (Figure 1). For example, crop production in Argentina is estimated to increase by almost 10 percent as import demand increases abroad due to tariff reductions and export taxes are eliminated domestically. The impact of removing border measures is more mixed for livestock production, declining in the Andean countries¹⁰⁵ and Central America¹⁰⁶, and increasing in Brazil and Other Mercosur countries¹⁰⁷.

Table 1--Percent change in crop and livestock production relative to 2030 baseline levels due to removal of agricultural support

ITEM/REGION	PERCENT CHANGE DUE TO A REMOVAL OF:		
	BORDER MEASURES	AGRICULTURAL SUBSIDIES	BORDER MEASURES PLUS AG SUBSIDIES
CROP PRODUCTION			
WORLD	0.22	-1.60	-1.30
DEVELOPED ECONOMIES	-0.15	-2.35	-2.28
DEVELOPING ECONOMIES	0.32	-1.41	-1.05
LIVESTOCK PRODUCTION			
WORLD	0.21	-0.46	-0.19
DEVELOPED ECONOMIES	0.74	-1.22	-0.37
DEVELOPING ECONOMIES	-0.18	0.09	-0.05

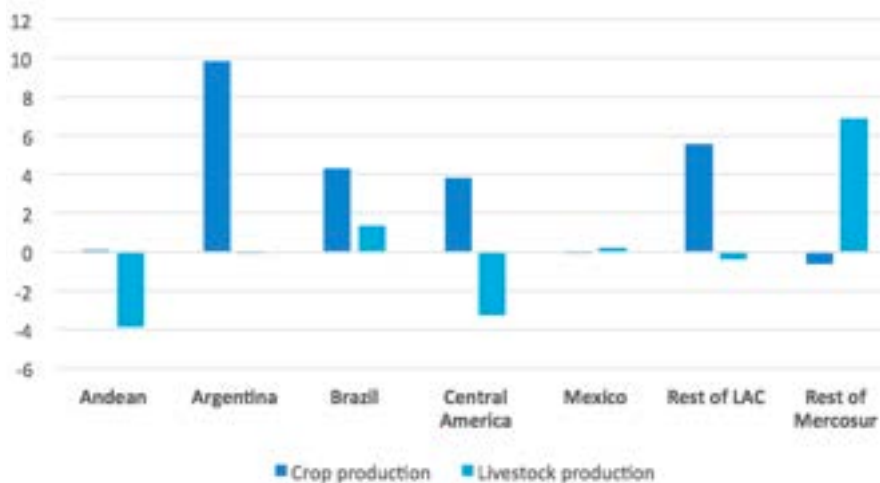
Source: Author's calculations based on Miragrodep

105. Andean countries include Bolivia, Chile, Colombia, Ecuador, Peru and Venezuela

106. Central America countries include Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama

107. Paraguay and Uruguay

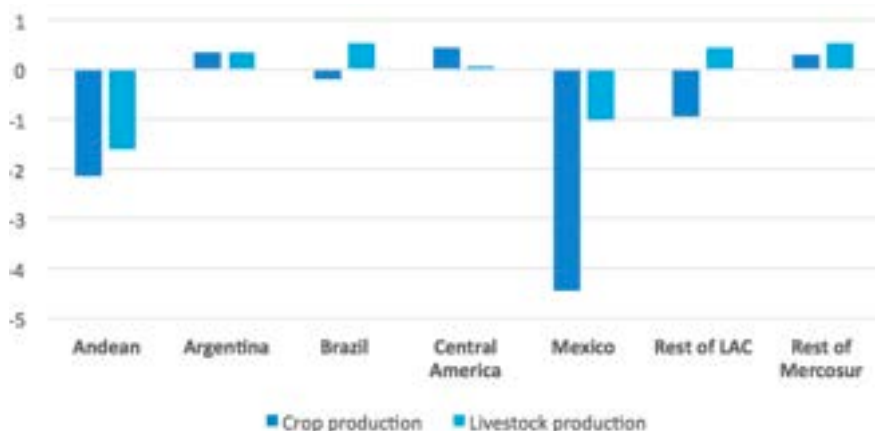
Figure 1--Percent change in crop and livestock production in LAC countries in 2030 compared to baseline levels due to removal of border measures



Source: Author's calculations based on Miragrodep

By contrast, crop and livestock production is projected to fall 1.6 percent and 0.5 percent, respectively, from 2030 baseline levels when agricultural fiscal subsidies are removed. Declines are projected to occur in developed and developing economies with the size of the decrease roughly proportionate to the level of fiscal subsidies in the individual country. As seen in Figure 2, among the LAC region, the largest impact are felt in the Andean countries and Mexico (where crop production is projected to decline by over 4 percent from 2030 levels), though some small gains are projected in the Mercosur region where declines in agricultural subsidies are offset by higher market returns.

Figure 2--Percent change in crop and livestock production in LAC countries in 2030 compared to baseline levels due to removal of agricultural fiscal subsidies



Source: Author's calculations based on Miragrodep

Table 2 shows the impact of removal of agricultural support on real (that is, inflation-adjusted) farm income. Removal of agricultural border measures is projected to increase global farm income by 0.19 percent above 2030 baseline levels. Real farm income in developing countries is projected to increase by 0.21 percent while a slightly lower increase (0.11 percent) is projected for farm income in developed economies. Farm income gains are largely positive across the LAC region, except for Andean countries where farm income is projected to fall by about 2 percent and for Mexico where a small decline is projected (down 0.5 percent). By contrast, Mercosur countries post large gains, with farm income in Argentina, for example, projected to increase by over 10 percent over baseline levels.

Removal of agricultural fiscal subsidies is projected to cause global farm income to decline by 5.7 percent in 2030. Most of that decrease is expected to occur in the developed economies (down over 11 percent) where fiscal subsidies account for a larger share of agricultural support (43 percent of total support). Farm income in developing countries is projected to fall by 4 percent where fiscal subsidies account for 21 percent of total agricultural support in those countries. Fiscal subsidies account for a relatively large share of total agricultural support in the Andean countries (where they account for 36 percent of total agricultural support) and in Mexico where fiscal subsidies account for 88 percent of total agricultural support. Not surprisingly, farm income in

those countries is projected to decline the most relative to other LAC economies due to a removal of agricultural subsidies.

Table 2--Percent change in real farm income relative to 2030 baseline levels due to removal of agricultural support

REGION	PERCENT CHANGE DUE TO A REMOVAL OF:		
	BORDER MEASURES	AGRICULTURAL SUBSIDIES	BORDER MEASURES PLUS AG SUBSIDIES
WORLD	0.19	-5.70	-6.29
DEVELOPED ECONOMIES	0.11	-11.42	-14.09
DEVELOPING ECONOMIES	0.21	-4.00	-3.77
ANDEAN	-1.68	-4.20	-6.07
ARGENTINA	16.02	0.87	16.76
BRAZIL	5.14	0.35	5.41
OTHER MERCOSUR	7.39	1.26	8.47
CENTRAL AMERICA	5.40	0.72	6.03
MEXICO	-0.54	-8.19	-8.68
OTHER LAC	2.89	-0.28	2.40

Source: Author's calculations based on *Miragrodep*

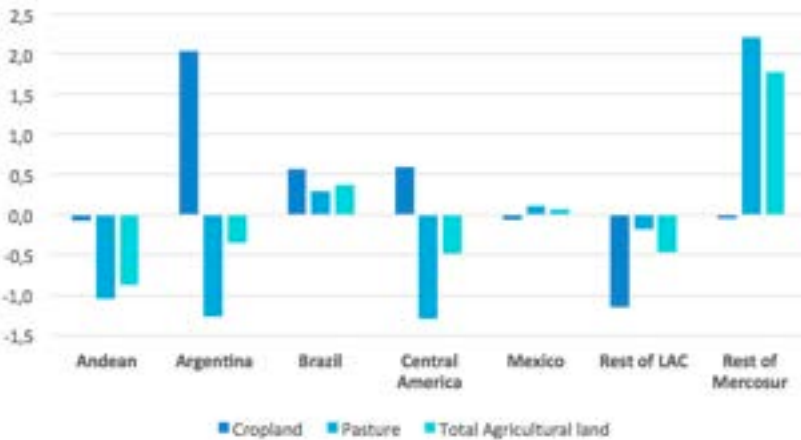
Impacts of Removing Agricultural Support on Greenhouse Gas Emissions

We now turn to how the removal of agricultural subsidies potentially affects climate outcomes globally and in the LAC countries. The impact of agricultural support on GHG emissions depends on a number of factors including the commodity in question, where it is produced and production methods. A recent study by Mamun, Martin and Tokgoz (2019) finds that production-related emission levels for the same commodities differ substantially between rich and poor countries and, also, within those groups. Moreover, removing support can have both negative and positive effects on GHG emissions, as production can shift between countries (Laborde et al. 2020). Removing border measures can decrease domestic production of a commodity but increase global production as consumption rises due to lower prices. This leads to a paradoxical outcome where GHG emissions may fall in the country where the border measures were removed, but rise worldwide because of increased global production. Searchinger et al. (2020) show that those impacts may be even more consequential if indirect land use change caused

by changes in policies results in deforestation or conversion of pastureland to cropland.

Our model captures both the change in direct GHG emissions due to regional shifts in crop and livestock production as well as the impact on GHG emissions due to land use change (for example, converting forestland to pasture or pastureland to cropland). Figure 3 shows the direct impacts in LAC countries on cropland and pastureland due to a removal of border measures. The impacts parallel the impacts in Figure 1 that looked at crop and livestock production. Cropland area increases in Argentina (up 2 percent), Brazil (up 0.6 percent) and the Central American countries (up 0.6 percent) while the other regions show relatively small declines. Shifts in livestock production to Brazil and other Mercosur countries (Paraguay and Uruguay) result in an increase in pastureland in those countries. Overall, total agricultural land use (cropland plus pastureland) declines in most regions except Brazil (up 0.4 percent) and other Mercosur countries (up 1.8 percent).

Figure 3 Percent change in agricultural land use relative to 2030 baseline due to removal of border measures



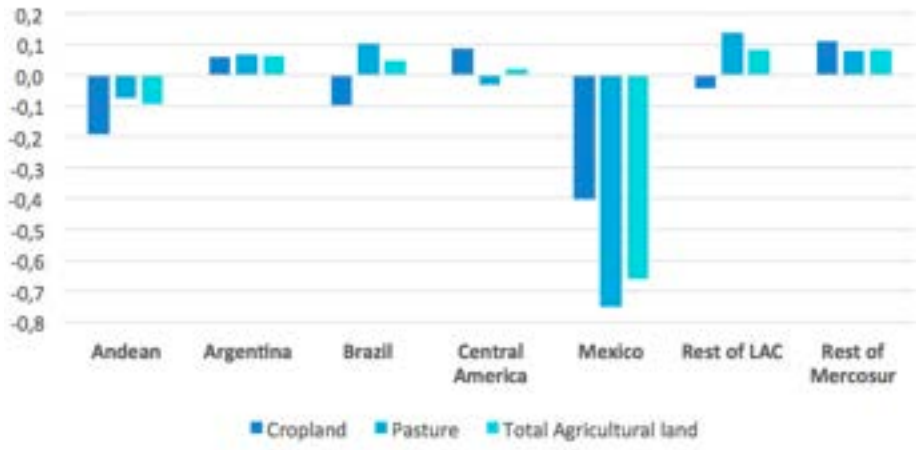
Source: Author's calculations based on Miragrodep

Figure 4 shows the impact of removing agricultural fiscal subsidies on land use. Overall, agricultural land use is projected to increase in the Mercosur region while the largest declines in percentage terms are projected for Mexico (total agricultural land use down 0.7 percent). Table 3 shows total impact on GHG emissions due to a

removal of agricultural support. Globally, GHG emissions are projected to decline by 78 million tonnes CO₂e in 2030 due to the removal of border measures and agricultural subsidies. Most of that decline is expected to occur in developing economies outside of LAC. This reflects, in part, the shift of livestock and crop production to the LAC regions. Overall, GHG emissions in LAC countries are expected to increase by 11.1 million tonnes CO₂e. Most of that increase is projected to be in Brazil (an increase of 28.7 million tonnes CO₂e) and other Mercosur countries (an increase of 13.2 million tonnes CO₂e) due, in part, to increased crop and livestock production and commensurate increases in pasture and cropland use (with a proportion decline in forest and other habitat).

It is important to note that our analysis does not consider the impact of climate smart agricultural practices which could increase production efficiency relative to GHG emissions, nor does it analyze carbon sequestration policies which could reduce overall carbon emissions through afforestation or other practices.

Figure 4 *Percent change in agricultural land use relative to 2030 baseline due to removal of agricultural subsidies*



Source: Author’s calculations based on Miragrodep

Table 3--Change in GHG emissions relative to 2030 baseline due to removal of agricultural support (mil tonnes CO₂e)

ITEM/REGION	PERCENT CHANGE DUE TO A REMOVAL OF:		
	BORDER MEASURES	AGRICULTURAL SUBSIDIES	BORDER MEASURES PLUS AGRICULTURAL SUBSIDIES
GLOBAL	-55.7	-11.3	-78.4
DEVELOPED COUNTRIES	31.4	-11.7	3.9
DEVELOPING COUNTRIES	-87.1	0.3	-82.3
ANDEAN	-26.4	-1.6	-27.8
ARGENTINA	-2.1	1.6	-0.5
BRAZIL	17.7	8.0	28.7
REST OF MERCOSUR	12.0	1.1	13.2
CENTRAL AMERICA	-2.5	0.1	-2.4
MEXICO	1.1	-3.4	-2.4
REST OF LAC	1.1	1.0	2.3
ALL LAC	1.1	6.7	11.1
OTHER DEVELOPING COUNTRIES	-88.2	-6.4	-93.4

Source: Author's calculations based on Miragrodep

Impacts on food prices and per capita food consumption

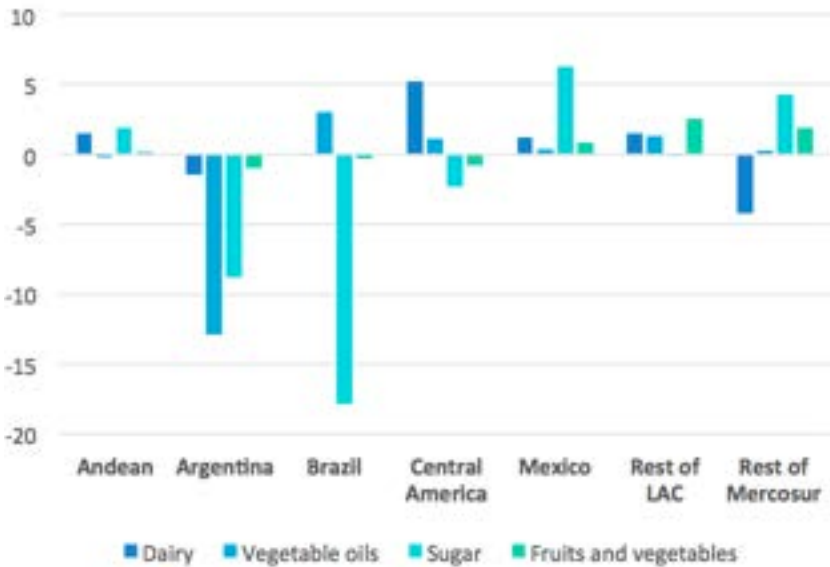
Agricultural support measures can impact nutrition through their impacts on income and on their impacts on relative prices. Border measures tend to increase domestic prices by insulating consumers from cheaper foreign supplies which tends to dampen demand. By contrast, agricultural producer subsidies can distort domestic production, hence leading to lower prices for those commodities. As we have seen, agricultural producer subsidies enhance farm income which increases the demand for food. Income effects are often proportionately larger in poorer households because poorer families tend to spend a larger share of their disposable income on food. Additional income in a poor household results in larger expenditures on food, increasing the quantity and often the types of foods consumed¹⁰⁸. The relative responsiveness of food consumption to changes in prices depends on consumer tastes and preferences. Generally, food demand is characterized as relatively less responsive to price changes compared to the demand of other consumption items. However, consumers will switch to other food choices, particularly if they are close substitutes.

Figure 5 shows the impact of removing agricultural border measures on per capita consumption of various food items within the LAC region. Generally, per capita consumption

108. As Du et al. (2004) point out, changing diets due to increased income do not necessarily correlate with better nutritional outcomes.

of food increases throughout much of LAC with the exception of some of the Mercosur countries where per capita consumption falls because of higher prices due to increased exports. For example, the large decline in sugar consumption in Brazil and to a lesser degree Argentina reflects increased global market access as countries remove border measures on what has been a highly protected commodity. Similarly, dairy consumption in Other Mercosur countries (Uruguay and Paraguay) is also estimated to fall. The decline in per capita vegetable oil consumption in Argentina reflects the removal of export taxes which increases soybean exports, thus raising prices throughout the soybean complex.

Figure 5 *Percent change in per capita consumption of various food groups relative to 2030 baseline levels due to removal of agricultural border measures*

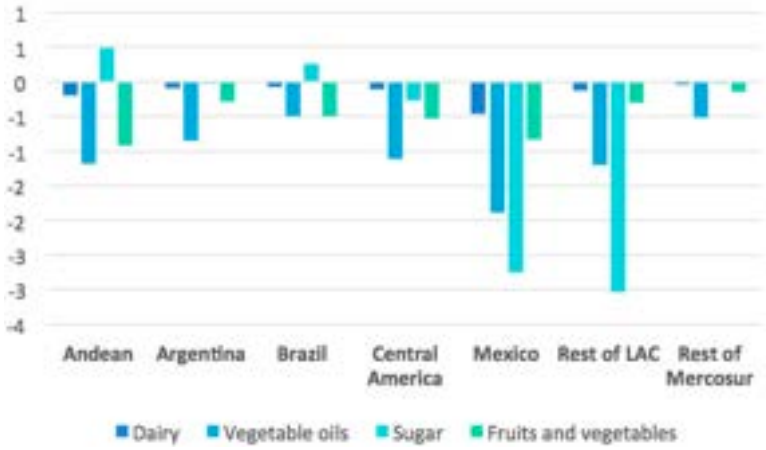


Source: Author's calculations based on Miragrodep

Removal of fiscal subsidies largely has a negative income effect on farmers which contributes to lower per capita food consumption for the products considered here. Per capita consumption levels of vegetable oils and sugar are projected to fall the most. In Mexico, for example, per capita sugar consumption is projected to fall by 3 percent and per capita

vegetable oil by almost 2 percent from baseline 2030 levels (Figure 6). This reflects the relatively large drop in farm income (down over 8 percent) seen in table 2.

Figure 6 *Percent change in per capita consumption of various food groups relative to 2030 baseline levels due to removal of agricultural fiscal subsidies*



Source: Author’s calculations based on Miragrodep

Conclusion

The LAC region accounts for a small share of global agricultural producer support. Yet, scenarios that consider removing global support would likely have a large impact on the region, improving global prices, increasing agricultural production and trade and generally raising farm income throughout the region.

If no mitigation efforts were considered, such liberalization scenarios could lead to an increase in GHG emissions as agricultural production and agricultural land use expand, particularly in net exporting countries like Argentina, Brazil, Paraguay and Uruguay. GHG emissions could be partially offset by cropping intensification (e.g., double cropping) to lessen impacts on deforestation, adopting more climate smart agricultural policies and through carbon sequestration.

Likewise, the impact of increased agricultural prices (due to higher LAC exports) and loss of agricultural subsidies could lead to an adverse impact on per capita consumption.

Here the impacts are more mixed across the region, with countries providing producers with agricultural subsidies (for example, Mexico) facing a larger drop in farm income which could adversely per capita food consumption. The adverse income effects could be offset by repurposing the more harmful subsidies tied to production or input use by decoupled subsidies (FAO/UNDP/UNEP 2021).

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Harmonization of sustainability standards under the WTO framework as the core to create an intersection of trade and environment mutually supportive

Sabine Papendieck and Pablo Elverdin

Introduction

In the context of climate change the world faces growing environmental pressures described as planetary boundaries including air and water pollution, land degradation, natural resources depletion and extinctions of species among other environmental issues and, in particular, more frequently extreme weather-related events and natural disasters affecting negatively the human development.

In this global scenario the impacts of trade on the environment are complex and depend on many factors.

Without coordination and effective global policies in place not aligned to sustainable development, trade can lead to environmental degradation by over-exploitation of natural and human resources. For example, instead of complying with strong environmental requirements locally, companies might prefer to move their production to countries with lax environmental standards in a race to the bottom to attract foreign direct investment leading to a global “carbon or environmental leakage”. Products produced in these origins are then consumed in countries with higher environmental commitments neutralizing by this way all mitigation efforts.

On the other hand, with targeted and well-designed public regulations trade promotes development and inclusive economic growth, having contributed to an unprecedented reduction of poverty levels in the last decade. Specially trade works for developing countries because

opening up to trade increases a country's economic growth as it allows each country to use its resources more efficiently by specializing in the production of the goods and services it can produce more competitively. But also trade also contributes directly to poverty reduction by opening up new employment opportunities and reducing the prices of goods and services for poor consumers, including foodstuffs. At the same time international trade facilitates not only the creation and expansion of markets for sustainable products, thereby strengthening incentives for more environmentally sustainable and socially responsible production, while boosting decent employment, green growth and improving access to clean technologies at lower cost. These public regulations tend to multiply through a "mirror effect" between markets.

From private initiatives the global value chains can facilitate knowledge sharing between participating firms on best environmental practices. Given that pioneers firms usually target markets with higher standards and requirements considering sustainability as a source of competitive advantage, a driver of efficient value chains and a gateway to tap into emerging business and trade opportunities, value chains can enable the spread of more environmentally friendly production techniques. In this scenario known as "race to the top", international trade gives export-oriented companies a strong incentive to upgrade their production to gain access to the markets with the highest environmental standards. That way happens a phenomenon of "intra-chain contagion".

Driven by private action, there is also a growing regulatory effect at the border. Given the multiplicity of private standards and multilateral environmental commitments at the public level, states increasingly regulate environmental requirements by product, which applies to both domestic production and external supply based on the national treatment principle and carbon border adjustment measures. This type of regulation is multiplied through a natural "mirror effect" or via trade agreements, producing a strong conditioning of market access.

Another key driver of bringing trade and environment closer together is the growing consumer awareness of environmental issues in their purchasing decisions, being this one of the main forces behind the rapid growth of markets and trade in sustainable products in recent years, along with the proliferation of sustainability public and private standards and labels.

In this way, international trade becomes a tool of the 2030 Agenda and its accompanying Sustainable Development Goals as well as the Addis Ababa Action Agenda on Financing for Development and the Paris Agreement commitments. So international trade offers unique opportunities to build a prosperous, climate resilient and environmentally sustainable world that expand and flourish.

To support these sustainable development agenda, it will be important to create an enabling, open environment for trade, that generates equal opportunities for economic growth and development, while guaranteeing a safe environment for consumers and businesses.

Striking this balance will require a global approach that promotes dialogue and the open exchange of information between different actors, so as to fully understand the issues surrounding trade and environment tandem. There is no one-size-fits-all answer to maximize the trade opportunities to build prosperous and environmentally resilient and sustainable economies, therefore, any regulatory response must consider all cases.

Environmental standards in trade and market access

Today the business landscape involves a mix of risks and opportunities driven by population growth, global health risks, new technology, extreme weather events and resources scarcity, among other factors.

The global economy consumes around 90 billion tons of resources per year, more than three times the level in 1970. By 2050, the global population is projected to increase from today's 7.6 billion to almost 10 billion and per capita income is expected to triple, leading to a two-fold increase in global material consumption levels¹⁰⁹. Finding better approaches to manage natural resources sustainably while fulfilling the material aspirations of a growing world population have become increasingly urgent.

One of the tools used has been sustainability standards and their corresponding labels applied to both local and imported products. Voluntary measures that guarantee that the products we buy do not hurt the environment and the workers that make them such as public-private partnerships and guidelines for environmental performance by companies (by single businesses, business associations, environmental or social non-governmental organizations, or governments) are increasingly being used to complement government mandated measures. The standards cover a full range of environmental impacts throughout a product's lifecycle, identify and promote best practice and support continuous improvement.

In agriculture, the use of sustainability certification and labelling schemes has increased markedly, being the best-known examples: coffee, cocoa, palm oil, soybeans, cotton and tea, among others. Even more these certifications have shown that the life cycle of imported goods (even if imported by air) can have an environmental footprint much lower than goods produced locally. That is because other factors such as production, packaging or disposal can represent most of a product's environmental impact. Further trade can in fact help to bridge relative differences in resource endowments across countries, thereby relieving resource scarcities in some regions and allowing for a more economically and environmentally efficient allocation of resources globally.

As part of this, it is important to ensure that sustainability requirements are transparent and based on relevant international standards, while not creating any unnecessary barriers to trade,

109. WTO/UN. 2018. Environment. Making Trade and Work for the Environment, Prosperity and Resilience.

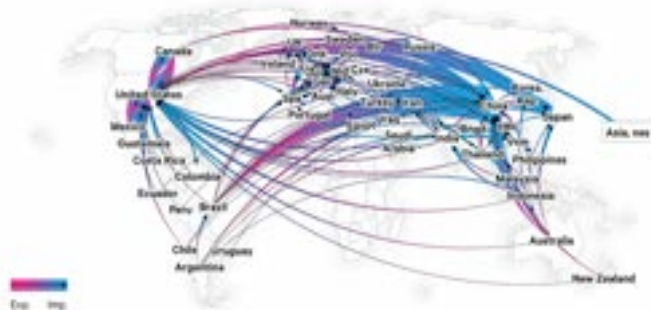
especially for developing countries limited to participating in sustainable trade due to poor access to finance, know-how and quality infrastructure. Decision makers in developing countries often say they have problems with sustainability standards because there is multiplicity of them, the compliance is costly, and they are not harmonized. So, sustainability standards have become a market reality and non-compliance can lead to the exclusion of producers from Global Value Chains. They turn into de facto mandatory requirements when market penetration is so intense that companies aiming to participate in markets have no other option than using them. In turn, if local quantitative information is not available, default values should be reported, that leave products imported from developing countries out of the market.

According to the ITC Standards Map the number of voluntary sustainability standards has continued to grow; currently, there are around 264 actives in 194 countries and 15 sectors, and about 457 ecolabels (according to Ecolabel Index) in 199 countries, and 25 industry sectors. The growth in the number of certified products is driven by the strong demand for products that are certified according to sustainability standards and is primarily driven by large retailers and newly public regulations. According to the same source the most frequently covered products are agricultural products, followed by processed food. Sustainability standards now apply to millions of farms, plantations, and factories worldwide.

The potential impact of sustainability standards in the global food trade

International agricultural trade reach US\$1.2 trillion in 2019, representing 22% of global merchandise trade (see Graph 1). This shows that the global food system has become highly complex and interconnected. Every country in the world is dependent, to a greater or lesser extent, on trade to fulfil its overall food needs (Benton, 2017).

Graph 1: Main trade exports flows of agricultural goods. Year 2019



Source: resourcetrade.earth

Agriculture is critically important for many developing countries. In the Least Developed Countries (LDCs) the sector accounts for 69% of the total employment, with an equal proportion of men and women¹¹⁰. In addition to providing trading opportunities, agriculture provides an important means of adding value through agro-processing. In turn, in most developing countries, food trade has great significance, either by virtue of ensuring the food security of its population or as the main source of foreign exchange earnings from exports. Considering specifically the case of America Latina and the Caribbean, as a food exporter, it represents 19% of the total trade of these goods globally, reaching US\$ 227 billion in 2019. The main exporters were Brazil (US\$ 82.6 billion), Argentina (US\$ 40.2 billion), Mexico (US\$ 26.3 billion), Chile (US\$ 17.3 billion) and Ecuador (US\$ 10.6 billion).

Graph 2: Main trade exports flows of agricultural goods from Latin America and Caribbean. Year 2019



Source: resourcetrade.earth

For their part, the main destinations for agro-industrial exports from Latin America and the Caribbean during 2019 were China (US \$ 45.5 billion) the USA (US \$ 41.9 billion), the European Union (US \$ 38.7 billion)¹¹¹, Japan (US \$ 7.1 billion) and Russian Federation (US \$ 4.8 billion). In consequence, considering the growing demands of sustainability standards (public and private) in the main food importers destinations, more than 60% of the volume of agri-food exports from Latin America and the Caribbean are under sustainability standards or could be affected in the very short term.

The key question is therefore how to design reliable, comparable and verifiable standards that help stimulate innovation, promote a high level of environmental protection with objective scientific verification and keep the overall costs of compliance as low as possible without providing misleading and unfounded environmental information known as green washing.

110. WTO. 2018. Mainstreaming trade to attain the Sustainable Development Goals.

111. UE-28. United Kingdom account imports from Latin America for US \$ 3.4 billions in 2019.

The current approach of the WTO regarding environment trade related measures

At the global level, a major step forward was taken in 1995 when the members of the WTO made sustainable development an explicit guiding principle for the newly created organization. In consequence, the first paragraph of the Marrakesh Agreement Establishing the World Trade Organization (WTO Agreement) states that “sustainable development and the protection of the environment are central objectives of the multilateral trading system”. Recalling the joint UN-WTO initiative Healthier Environments through Trade, the Nairobi Ministerial Declaration and the 2030 Agenda for Sustainable Development in 2015 that emphasis on the role that trade plays in promoting sustainable development, the members of the WTO acknowledge that trade and environment are mutually supportive.

In this sense, this issue is addressed within the WTO in the context of the WTO Committee on Trade and Environment (CTE) established in 1994 but also in other WTO regular Committees or Bodies where environment issues arise such as in the Negotiating Group on Rules (fisheries subsidies), the Technical Barriers to Trade and Application of Sanitary and Phytosanitary Measures as well as in the Committee on Agriculture and Committee on Trade and Development. Additionally, the WTO Secretariat constantly collaborates with UN environmental entities to ensure mutual supportiveness between trade and environmental policies.

Particularly the CTE was created to identify the relationship between trade measures and environmental measures, in order to promote sustainable development and to make appropriate recommendations on whether any modifications of the provisions of the multilateral trading system are required, compatible with the open, equitable and non-discriminatory nature of the system. The CTE also serves as a forum where UN Environment and the secretariats of several multilateral environmental agreements (MEAs) regularly brief WTO members on their work.

At the Doha Ministerial Conference, in 2001, WTO members recognized that under WTO rules no WTO member should be prevented from taking measures for the protection of the environment at the levels it considers appropriate as long as they are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.

As a general clause, WTO members are free to adopt environmental policies, such as environmental requirements and taxes, at the level they choose, even if they significantly restrict trade, as long as they do not introduce unjustifiable or arbitrary discrimination or disguised protectionism as an excuse to protect domestic producers. As it has been clarified by environment-related disputes at the WTO the environmental trade related measures have to be 1) coherent, 2) fit-for-purpose, 3) mindful and holistic and 4) flexible in order to reduce distortionary effects of non-tariff measures and to provide the stability and predictability needed for international trade to play its full role for the achievement of sustainable development.

The WTO's legal framework always tried to strike a very delicate balance between the interests of protecting legitimate values such as human animal and plant health and the environment and maintaining markets open. To preserve this balance WTO members when adopting non-tariff measures need to ensure that these are non-discriminatory, no more trade restrictive than necessary measures to achieve their objective, based in scientific studies or international standards, and administered through efficient administrative procedures (Article XX GATT). Additionally, something that is important is to provide developing country exporters affected by the measure with the technical and financial assistance to be able to comply with its requirements, including conformity assessment and development of international standards. To provide this assistance the WTO together with other international agencies (FAO, WHO, OIE and the World Bank established the Standards and Trade Development Facility (STDF)). The aim is not only to ensure that environment and trade are mutually supportive, but to promote the use of trade as a vehicle to deliver on the environmental and resilience agenda.

In Doha the members agreed on three negotiating topics: relationship between the WTO and MEAs, elimination of trade barriers on environmental goods and services, and clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries.

At the WTO's 10th Ministerial Conference held in Nairobi in 2015, WTO members delivered a major part of this target by adopting the WTO Ministerial Decision on Export Competition. This decision eliminates agricultural export subsidies and sets out new rules for export credits, international food aid and exporting state trading enterprises.

In Buenos Aires, at the WTO's Eleventh Ministerial Conference held in December 2017, ministers agreed to continue to engage constructively in fisheries subsidies negotiations and to set themselves a goal for the conclusion of these negotiations by the next Ministerial Conference.

In November 2020 sponsored by 53 members a structured discussion on trade and environmental sustainability (TESSD) was organized to complement the existing work of the Committee on Trade and Environment and other relevant WTO committees and bodies. The first meeting took place virtually on 5 March 2021. During it, Brazil, Ecuador, El Salvador, and Paraguay introduced a written proposal highlighting the key role of the agricultural sector in achieving sustainable development and calling on TESSD participants to look at the environmental impacts of agricultural subsidies, along with the role of environment-related standards and regulations on agricultural trade. In the successive meeting of the TESSD participants outlined their views on what the priority issues for discussion should be and what concrete outcomes could be delivered at the WTO's 12th Ministerial Conference (MC12) and beyond. During the last meeting (September 2021) participants reviewed a revised draft elements text, which underscores the role of trade policy in helping address climate change and other environmental challenges. It sets out commitments on future work and objectives as well as a work program for the TESSD discussions in 2022.

The need to harmonize all the sustainability standards to concrete benefits for trade and environment in the global food value chain

For trade to play its full role in supporting markets for sustainable goods, a key step is to correct the trade restrictions and distortions faced by producers of such goods when accessing foreign markets. Ensuring that sustainability standards in particular are transparent, that they do not discriminate or restrict trade unnecessarily and that they are based on WTO principles, can go a long way towards opening up new trade opportunities, especially for small and medium-sized producers in developing and least-developed countries. Although there is a legal scaffolding that covers different aspects of the trade related environmental measures imparted by the governments at the WTO the last control resides in the dispute settlement body, which terms are not always suitable for development countries and their local export-oriented value chains. In turn, it is necessary to start incorporating producer countries in the development of these standards in order to include within the life cycle analysis the particularities of the production systems in these origins with an effective transfer of knowledge strengthening the capacity of small and medium-sized producers to seize trade opportunities for sustainable goods. At least, the impact of their non-incorporation due to their exclusion from the market could endanger food safety.

Additionally, the implementation of mitigation measures related to trade must be associated with financial aid in a binding manner from the requesting countries to the producing countries, mainly developing, in accordance with the principles of the multilateral environmental agreements.

On the other hand, it is necessary to incorporate all the advances in the science of calculation / estimation of potential environmental impacts and the voluntary and official market regulations together with the criteria to avoid double counting to the WTO rules. It is necessary to keep the trade rules up to date in order to prevent environmental measures from illegally hindering trade.

Beyond these adjustments necessary in the procedures already established in the legal framework of the WTO, a waste range of voluntary sustainability standards imposed mainly from private marketing chains are outsider from the WTO legal framework. These do pose a de facto exclusion from the trading system of producers from developing countries causing competitive disadvantages and ultimately loss of market access, re-impacting then in the other indicators of sustainable development.

So, turning the relationship between trade and the environment into concrete benefits imposes new and urgent demands for effective cooperation among countries and the private sector. In this order Governments need to advance on simplification and harmonization of all schemes with proven impact on the environment as a totally necessary condition. In this

all the environmental standards will be double checking by the principles and mechanisms established in the WTO framework to create a virtuous intersection between environment and trade and ensuring that environmental standards do not become barriers to trade. There is an urgent need to fulfil the WTO's role as a steward of sustainability in global trade.

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Are Plurilaterals a promising trade liberalization modality?¹¹²

Antoine Bouët and David Laborde

Introduction

After 50 years of success, multilateral trade liberalization, conducted under the umbrella of the World Trade Organization (WTO), is in a deadlock, as illustrated by the impasse in which the Doha Round is for almost 20 years. Many explanations have been advanced. Let us quote three of them. First, there are many trading partners involved in the negotiation and their interests are too heterogeneous, such that there is no outcome benefiting all parties (Bouët and Laborde, 2010). Second the welfare gains expected from a new round of multilateral trade liberalization are small compared to the internal redistributive effects that it may imply (Rodrik, 1994). Third, there is asymmetric information not only between policymakers and the producers they want to protect from income variation, but also between trade negotiators at WTO about the political influence of domestic producers in each country. This double informational asymmetry gives birth to informational rents and makes difficult the implementation of free trade (Bouët, Laborde and Martimort, 2020).

New modalities of trade liberalization have been explored: sectoral initiatives (Laborde, 2011), weighted voting approach instead of consensus (Jackson, 2001), specific proposals like improved effectiveness of the Agreement on Subsidies and Countervailing Measures (to better capture subsidies to state-owned enterprises) and re-designing of Special and Differential Treatment (Council of the European Union, 2018), and plurilateral agreements.

Indeed, an alternative to multilateralism is the implementation of plurilateral agreements, i.e., sectoral trade liberalization conducted by a subset of WTO members. In this paper we evaluate the opportunities given by plurilateral agreements (or plurilaterals) in terms of concluding trade liberalization agreements (tariffs elimination) and study the characteristics of “agreeable” plurilaterals.

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We start by a precise definition of plurilateral agreements with a distinction (Draper and Dube, 2013) between MFN plurilaterals and non-MFN plurilaterals. Then we use a multi-country multi-sector computable general equilibrium model (MIRAGRODEP) to evaluate the economic and trade consequences of a very large number of plurilateral agreements with a relatively limited country and sector disaggregation (8 regions, with three large and rich countries/zones and five groups of poor or emerging countries; and 10 sectors, with 7 agricultural and industrial sectors and three in services) based on the GTAP 10 database (Aguar, Narayanan and McDougall, 2016). With this limited disaggregation, we consider all the possible plurilateral agreements: 64,770. This modelling exercise leads to several interesting conclusions concerning the features of potential plurilateral agreements.

A few definitions

It is difficult to find a rigorous definition of plurilaterals. The legal text establishing the World Trade Organization (Marrakesh Agreement ⁻¹¹³) cites four plurilateral trade agreements: The Agreement on Trade in Civil Aircraft, the Agreement on Government Procurement, the International Dairy Agreement, and the International Bovine Meat Agreement. This text states that these four agreements are part of the Marrakesh Agreement “for those Members that have accepted them, and are binding on those Members” but they “do not create either obligations or rights for Members that have not accepted them”.

According to Alan Deardorff’s Glossary of International Economics: “Plurilateral agreements, both within the WTO and separate from it, contrast with larger multilateral agreements in that the former are signed by, and apply to, only those countries that choose to do so, while all WTO members must be party to the multilateral agreements”¹¹⁴.

In this paper we define plurilateral agreements in the following way. Let us consider a world with I sectors and R WTO members. We adopt the following definitions:

- A trade agreement defined on $i=I$ and $r=R$ is a WTO multilateral trade agreement like the Doha Round.
- A trade agreement defined on $i=I$ and $r<R$ is a regional trade agreement (RTA).
- A trade agreement defined on $i<I$ and $r=R$ is a WTO sectoral initiative.
- A trade agreement defined on $i<I$ and $r<R$ is a ‘plurilateral’.

So, a plurilateral is a trade agreement covering a limited number of sectors of activity and negotiated between a limited number of WTO members. Following Draper and Dube (2013), we make a distinction between inclusive and exclusive plurilaterals.

113. Available on the WTO website at https://www.wto.org/english/docs_e/legal_e/04-wto_e.htm.

114. <http://www-personal.umich.edu/~alancedear/glossary/p.html>; visited on April, 14th, 2020.

Inclusive plurilaterals are trade liberalization agreements between $r < R$ countries in a certain number $i < I$ of sectors where these r countries remove import duties in these i sectors on a Most Favored Nation basis, meaning that they open their domestic markets to all WTO members. Draper and Dube (2013) state that this MFN basis obviates the need for consent by WTO members.

Exclusive plurilaterals are trade liberalization agreements between $r < R$ countries in a certain number $i < I$ of sectors where these r countries remove import duties in these i sectors without a MFN basis, meaning that each country of the agreement open its domestic market to only the $r-1$ other members of the agreement while keeping the same level of protection with respect to other WTO members. This non-MFN basis may imply that the consent by WTO members is needed, as the MFN clause, a fundamental principle of WTO, is violated.

However exclusive plurilaterals that cover more than 90% of commerce between contracting parties may be considered as RTAs since: this is an agreement which implies that “the duties and other restrictive regulations of commerce ... are eliminated on substantially all the trade between the constituent territories in products originating in such territories.” (WTO, article XXIV-8b) and which does not imply an augmentation of protection of members vis-à-vis non-members. Such plurilaterals should not be contested by WTO. In the next modelling exercise, we take into account this point by including as plurilaterals, trade agreements between $r < R$ regions on a complete removal of all import tariffs in all agricultural and industrial sectors: they are defined above as regional trade agreements but we consider these agreements as plurilaterals.

Model, data, disaggregation and scenarios

To evaluate the potential that plurilaterals can provide, we use a static version of the MIRAGRODEP model. MIRAGRODEP is a multi-country multisector Computable General Equilibrium (CGE).¹¹⁵

Geographic and product disaggregation

We adopt a limited geographic and product disaggregation. Indeed, with $r=8$ regions and $i=10$ sectors, of which $i=7$ can be a target of trade liberalization (3 sectors of services are excluded from such a scheme), we must already study a great number of combinations: $[\sum_{(r=1)}^{r=8} \square C_{r^{A^8}}] \cdot [\sum_{(i=1)}^{i=7} \square C_{i^{A^7}}] = 32,385$. Indeed, each sectoral combination of 1 to 7 sectors among 7 ($\sum_{(i=1)}^{i=7} \square C_{i^{A^7}}$) has to be combined with $[\sum_{(r=1)}^{r=8} \square C_{r^{A^8}}]$ combinations in the regional space. Since there are two options of scenario, either an inclusive plurilateral, i.e. with the MFN clause, or an exclusive plurilateral, i.e. without the MFN clause, a geographic et product disaggregation with $r=8$ regions and $i=10$ sectors implies $32,385 \cdot 2 = 64,770$ simulations¹¹⁶.

Table 1 indicates the geographic disaggregation with only 8 regions, and the correspondence between each region and the GTAP nomenclature¹¹⁷. It also provides an average import duty, an average duty faced on exports¹¹⁸ and the share of each region in world exports

113. See Bouët et al. (2020).

116. Let us suppose we do the same exercise with 20 regions and 20 sectors concerned with liberalization. A simple calculation gives more than 2 trillion of simulations!

117. The simulations are based on the GTAP10 database. See Aguiar, Narayanan and McDougall (2016). These geographical and sectoral disaggregations are based on economic, trade and protection criteria.

and imports of goods. The two poorest regions, South Asia and Sub-Saharan Africa, are the most protectionist one, while representing a small share of world trade in goods.

Geographic disaggregation and GTAP correspondence

Region Label	Average import duty	Average duty faced on exports	Share in world exports of goods	Share in world imports of goods	GTAP Regions
South-East Asia & Oceania	3.35%	3.42%	17.9%	17.2%	Australia, New Zealand, Rest of Oceania, Japan, South Korea, Taiwan, Rest of East Asia, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Singapore, Thailand, Viet Nam, Rest of South East Asia
China	3.9%	3.91%	13.8%	10.6%	China, Hong Kong
South Asia	8.53%	3.75%	2.2%	3.3%	Bangladesh, India, Pakistan, Sri Lanka, Nepal, Rest of South Asia
North America	1.34%	2.86%	13.1%	18.5%	Canada, USA, Mexico, Rest of North America
Latin America ¹¹⁹	6.90%	2.51%	4.0%	4.1%	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, Rest of South America, Costa Rica, Guatemala, Nicaragua, Panama, El Salvador, Honduras, Rest of Central America, Dominican Republic, Jamaica, Trinidad and Tobago, Rest of Caribbean
European Economic Area with Euro Mediterranean Area and Middle East	2.05%	2.36%	41.9%	40.7%	Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom, Switzerland, Norway, Rest of EFTA, Bulgaria, Croatia, Romania, Iran, Turkey, Israel, Jordan, United Arab Emirates, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, Rest of Western Asia, Egypt, Morocco, Tunisia, Rest of North Africa, Rest of the World
Eastern and Central Europe, Russia included	6.11%	3.29%	4.5%	3.3%	Albania, Belarus, Russia, Ukraine, Rest of Eastern Europe, Rest of Europe, Kazakhstan, Kyrgyzstan, Mongolia, Rest of Former Soviet Union, Armenia, Azerbaijan, Georgia
Sub-Saharan Africa	8.21%	1.94%	2.6%	2.2%	Nigeria, Senegal, Benin, Burkina Faso, Cote d'Ivoire, Ghana, Guinea, Togo, Rest of Western Africa, Cameroon, Central Africa, South Central Africa, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Tanzania, Uganda, Zambia, Zimbabwe, Rest of Eastern Africa, Botswana, South Africa, Namibia, Rest of South African Customs Union

Source: GTAP10 and authors' calculations

119. Mexico is not included in the Latin America region, but in the North America region.

Table 2 indicates the sector disaggregation with only 10 sectors and the correspondence of each sector with the GTAP nomenclature with the world average import duty and the share of each sector in total world trade of goods. It is worth noting that the agricultural sector is the most protected one but represents less than 9% of world trade in goods.

Sector disaggregation and GTAP correspondence

Sector Label	Average import duty	Share in world trade of goods	GTAP Sectors
Agriculture	8.1%	8.7%	Paddy Rice, Wheat, Other cereals, Vegetables and Fruit, Oilseeds, Sugar Crops, Fibre Crops, Other Crops, Cattle, Other Animals and Animal Products, Raw Milk, Wool, Cattle Meat, Other Meat Products, Fats and Vegetable Oils, Dairy Products, Rice, Sugar and molasses, Other Food Products, Beverages and Tobacco
Primary (non agr.)	0.7%	18.4%	Forestry, Coal, Oil, Gas, Other Minerals, Coke and Refined Petroleum Products
Fisheries	4.1%	0.2%	Fishing
Textiles, Apparel, Leather products	7.5%	5.9%	Textile, Wearing Apparel, Leather and leather products
Other manufactured products	1.6%	18.6%	Wood and Wood Products, Paper and Paper Products, Computer, Electronic and Optical Products, Manufacture of Furniture
Manufactured intermediate goods	2.5%	24.3%	Chemical and Rubber Products, Non-Mineral Products, Manufacture of Iron and Steel, Non Ferrous Metals, Fabricated Metal Products
Manufactured capital goods	3.5%	24.0%	Motor Vehicles, Other Transport Equipment, Machinery and Equipment
Other services	-	-	Production, Collection and Distribution of Electricity, Manufacture of Gas, Water, Construction, Postal and Publishing Activities, Motion picture, Financial Service Activities, Insurance Reinsurance, Professional, Scientific and Technical Activities, Arts, Entertainment and Recreation, Public Administration, n.a.
Trade	-	-	Wholesale and Retail Trade
Transportation	-	-	Land Transport, Water Transport, Air Transport

Source: GTAP10 and authors' calculations

Before evaluating plurilaterals, a full tariff liberalization scenario has been implemented with this disaggregation: it implies an increase by 0.28 percent of world welfare and by 0.24 percent of Gross Domestic Product (GDP). This scenario is beneficial for all regions

in terms of representative agent's welfare and GDP, except Sub-Saharan Africa which is affected by an erosion of trade preferences (deterioration of terms of trade). Gains are relatively large for China, South-East Asia and Eastern and Central Europe and relatively small for the EFTA region.

Design of scenarios

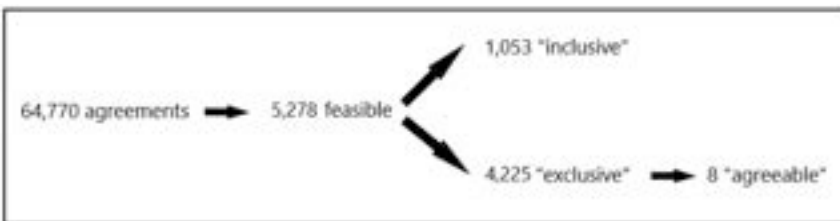
We conduct 64,770 simulations based on the number of combinations of r regions in a set of 8, and i sectors in a set of 7. In this framework, a zero-for-zero duty approach is proposed. No other reform than import tariff is implemented. We conduct an estimation of the economic and trade consequences of inclusive and exclusive plurilaterals.

What could plurilaterals bring in terms of liberalization?

The core of the game

We adopt a first simple rule to distinguish the plurilaterals that can be adopted from the ones that cannot: the representative agent's welfare is increased for each region, member of the agreement (Pareto-improving agreement). Over 64,770 potential plurilaterals, 5,278 trade deals imply positive welfare gains for each of their members: this is what we call the core of the game¹²⁰. Amongst these 5,278 plurilaterals, 4,225 are exclusive and 1,053 are inclusive (see Figure 1). It shows that if inclusive plurilaterals can be implemented, the absence of an MFN clause may facilitate the conclusion of trade agreements since adding the MFN clause adds 248 agreements in the core, but remove 3,420 compared to the situation without the MFN clause.

Feasible, inclusive, and exclusive agreements amongst the 64,770 scenarios



Source: authors' design

119. This differs from the definition of a core in game theory: the set of allocations that cannot be improved upon by a subset of agents.

Amongst the 4,225 exclusive plurilaterals, we exclude trade deals which imply a loss for non-members since they can be opposed by other WTO members. This implies a reduction of the number of potential plurilaterals from 4,225 to 8 trade agreements. If we accept a threshold of 0.05% of welfare loss for non-members, the number of agreeable exclusive plurilaterals is 1,565 (see Table 3). At a threshold of 1%, all exclusive plurilaterals are “agreeable”.

Number of “agreeable” exclusive plurilaterals according to a threshold of welfare loss for non-members

Threshold of loss (%)	Number of agreeable exclusive plurilaterals
0	8
0.01	759
0.05	1,565
0.25	3,812
0.5	4,187
1	4,225

Source: authors' calculation

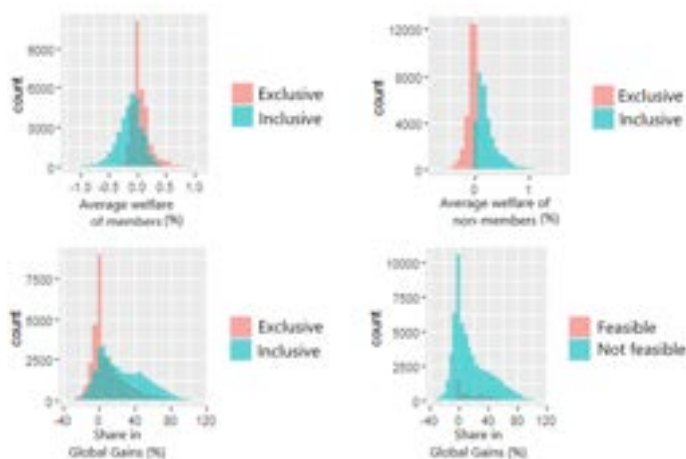
In a nutshell, evaluating the impact of plurilaterals on welfare substantially reduces the number of feasible trade agreements: we found that starting from 64,770 potential trade agreements, only 1,053 inclusive plurilaterals and 8 exclusive plurilaterals can be implemented.

Welfare implications of plurilaterals

We illustrate the implications of an MFN clause by plotting distribution of plurilaterals by various metrics (see Figure 2): average welfare gain of members of plurilaterals, average welfare gain of non-members, share in global gains, i.e. world gain from a specific scenario divided by the world gain from full liberalization. We either oppose results for exclusive plurilaterals to inclusive plurilaterals, or plurilaterals in the core to those outside the core (not feasible).

From the top two graphs, we see that the absence of an MFN clause tends to raise the average welfare of members and decrease the average welfare of non-members. The two bottom graphs point out that while the inclusion of an MFN clause is relatively efficient in terms of the magnitude of the global gain of an agreement, compared to non-inclusion of this clause, plurilaterals in the core (i.e. without losers) only manage to capture a part of the global gains.

Distribution of plurilaterals from the core according to three metrics

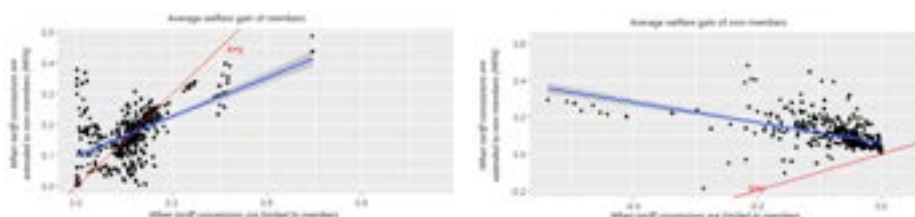


Source: authors' calculation

In Figure 3, top graph, we plot all plurilaterals in, with the average welfare gain of members in the exclusive scenario on the x-axis and the average welfare gain by member in the inclusive scenario, i.e. the trade deal associated to the same agreement but with the addition of the MFN clause, on the y-axis. The bottom graph replicates the same graph, but plots average welfare gain of non-members, instead of members.

In the top graph, we see that a majority of plurilaterals stands under the bisector: it implies that the inclusion of an MFN clause reduces more often the average gain of members than it augments it. This is particularly true for exclusive plurilaterals implying a relatively large average gain for members. The best-fit line is increasing: the dispersion of points in the cloud is high, but the positive slope indicates that for some trade plurilateral agreements, the MFN clause is a game-changer since its non-inclusion raises significantly the average welfare gain of members.

Impact of an MFN clause added to an exclusive plurilateral: the cases of “core” agreements



Source: authors' calculation, all axes are in %.

The bottom graph shows that almost all exclusive plurilaterals implies a negative average welfare variation for non-members, but that the inclusion of an MFN clause increases significantly this average variation such that it becomes positive for 82% of these trade deals: the inclusion of this clause is a major stake for non-members. The best-fit line is decreasing, for some trade plurilateral agreements on the left of the graph, the MFN clause is a game-changer since its inclusion raises significantly the average welfare gain of non-members.

Regional and sectoral coverage of inclusive and exclusive but “agreeable” plurilaterals

Let us see now which regions are regularly within inclusive and exclusive but “agreeable” (at a threshold of -0.5% welfare variation level) plurilaterals. Table 4 indicates, for each region and each sector, the number of plurilaterals, either exclusive or inclusive, that include this region as member or cover liberalization in this sector. For example, over a total of 4,225 feasible exclusive plurilaterals, 973 include China. Over 1,053 feasible inclusive plurilaterals, 236 include China.

Number of “agreeable” (CORE) containing each region and covering each sector

	Exclusive	Inclusive		Exclusive	Inclusive
China	973	236	Agriculture	1422	59
South-East Asia & Oceania	2036	744	Primary (non agr.)	2371	538
South Asia	1513	376	Fisheries	2119	521
North America	1552	596	Textiles, ..	1618	269
Latin America	1689	555	Other Manuf.	2136	393
European Eco...	2167	550	Manuf. Interm goods	1956	227
Eastern and Central Europe...	1605	515	Capital Goods	3316	1035
Sub-Saharan Africa	1151	504			

Source: authors' calculation. Note: European Eco... stands for European Economic Area with Euro Mediterranean Area and Middle-East ; Eastern and Central Europe... stands for Eastern and Central Europe, Russia included; Textiles, .. stands for Textiles, Apparel, Leather products; Other Manuf. stands for Manufactured intermediate goods; Manuf. Interm goods stands for Manufactured capital goods

The region which is the most frequently included in plurilaterals is the South-East Asia & Oceania region followed by the European region. Both regions represent a relatively large share of world imports of goods, and are more protectionist than the other rich region, North America (see Table 1). The size of the European region's market is large (40.7% of world imports of goods – see Table 1), but also the average and dispersion of protection is high: if the average import tariff is only 2.1%, the dispersion of tariffs is high not only across sectors (0.4% in the Primary sector, 4.0% in the textile sector), but also within a sector across exporting regions: in agriculture, the tariff applied by the European region is only 2.2% on Sub-Saharan Africa, but 11.3% on China and 10.5% on South-East Asia & Oceania.

The sector, which is the least frequently included in plurilaterals, either exclusive or inclusive, is agriculture. This is a sector with relatively high and heterogeneous protection, which implies relatively high welfare gains and losses: a trade deal gives net-exporting regions an improvement of terms of trade, while net-importing regions may on one side lose from deterioration of terms of trade, but on the other side, gain from allocative efficiency. The sector 'Capital goods' is the most frequently sector included in a plurilateral, either exclusive or inclusive: in terms of trade this is a large sector (around one quarter of world trade of goods) with an intermediate level of protection (3.5%).

The case of Latin America is interesting. As shown by Table 1, initially this region is relatively protectionist whereas it does not face a relatively high duty on its exports to the rest of the world. However, behind these averages, tariffs vary across sectors and across trading partners. Latin America's agricultural exports are penalized by high duties abroad (9.1% on average), especially towards South-East Asia & Oceania (24.1%), South Asia (12.5%), Eastern and Central Europe, Russia included (12.2%) and Sub-Saharan Africa (11.5%). On the imports side, tariffs imposed by this region are relatively high in the Textiles, Apparel, Leather products (14.8%), Agriculture (10.1%), and Capital goods (9.0%).

There are 2,244 trade deals (1689+555; see Table 4) in the core with Latin America included. Table 5 presents the distribution of these agreements by partner and sectors.

Distribution by sector and partner of “agreeable” (CORE) agreements with Latin America

China	520	Agriculture	720
South-East Asia & Oceania	1,198	Primary (non agr.)	1,174
South Asia	823	Fisheries	1,123
North America	859	Textiles, Apparel, Leather products	673
European Economic Area with Euro Med. Area incl.	1,194	Manufactured intermediate goods	824
Eastern and Central Europe, Russia included	954	Manufactured capital goods	1,992
Sub-Saharan Africa	711	Other manufactured products	982


Source: authors' calculation

Over 2,244 plurilaterals which include Latin America, 1,198 also include South-East Asia & Oceania and 1,194, the European Economic Area. Indeed, the former region is highly protectionist in agriculture and the latter is less protectionist but represents a large market for Latin America's exports. They are also competitive in exports of capital goods which is by far the sector the most frequently included in these trade deals with Latin America: as mentioned earlier this is a sector in which Latin America is relatively protectionist and which is important for the economy. Moreover, South-East Asia & Oceania and the European Economic Area are relatively competitive as they detain respectively 19.3% and 46.3% of total world exports.

Conclusion

The objective of this study was to provide characteristics of inclusive and exclusive plurilaterals and to see if this type of agreement is a promising trade liberalization modality. Inclusive plurilaterals may be the most promising direction, but they may not be easy to achieve since the addition of an MFN clause reduces the value of the agreement for members. There is a clear trade-off here between efficiency and acceptability. To be agreed by consent of WTO members, plurilateral agreements must either be MFN-based, or welfare-improving for non-members. Usually in the former case, the value of such agreements for members is less than the same deal not based on an MFN clause. And non-MFN plurilateral agreements that are welfare-improving for non-members are seldom.

Of course, these results may be dependent on the geographic and sectoral disaggregation which are selected. The conclusions may also change if tariff removal is not complete, if other trade distortions were included (domestic support), or other objectives than



welfare are taken into consideration (Gross Domestic Product, terms of trade, trade volume, ...). However, the main point here was to draw first “general conclusions” concerning plurilaterals. It was done at a great cost in terms of calculation time as we conducted an evaluation of 64,770 trade agreements.

This is a first study on an important and promising topic that raises other questions. Could exclusive plurilaterals with a critical mass of trade (75% of world trade or more than 90% of trade between members) be challenged by WTO? What could be the long-term consequences of the multiplication of plurilateral trade agreements? Do these plurilaterals facilitate or make even more difficult future trade negotiations? These are important areas of research that we will investigate soon.

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Food Products, the WTO Dispute Settlement System and Trade Remedies

Eduardo Bianchi

Introduction.

One of the Uruguay Round's more notable achievements was the establishment of the WTO Dispute Settlement System, considered as the "Jewel in the Crown" of the WTO. When the Uruguay Round negotiations were initiated in 1986, there was a growing consensus that the original GATT dispute settlement system was ineffective. Compliance was a key failing of the old system; GATT contracting countries either blocked or simply ignored the findings of panels. The GATT's consensus rule meant any party—including the potential respondent in a trade dispute who might be accused of wrongdoing—could block not only rulings but even the initiation of an inquiry. Thus, third-party intermediation was often not possible to resolve trade frictions (Bown, 2019).

This was particularly problematic and embarrassing for high-profile trade disputes involving food related products, such as bananas, beef hormones and tuna-dolphin. The failure to resolve these prominent disputes undermined the credibility of the GATT dispute process (Bown and Prusa, 2011). Consequently, a dispute settlement process that improved on both the timeliness and enforceability of dispute decisions was one of the major goals of the Uruguay Round and represented a significant advance over the GATT system.

The dispute settlement system of the WTO is one of the areas in public international law with a mechanism that provides binding third-party adjudication of disputes between sovereign states. With close to 600 cases in its twenty-five years of existence, it is also probably the busiest international dispute settlement system in the world, surpassing in cases for example to the International Criminal Court and the International Tribunal for the Law of the Sea. Hence, the wide use of the WTO dispute settlement system no doubt reflects its success and the fact that the member states have confidence in it to resolve their trade disputes. On the other hand, the system is considered far from perfect, and has drawn criticism from its users.

This paper presents a statistical analysis of twenty-five years of WTO disputes for the case of food products. In the next section we define what we understand for food products in this study and take a first look to the disputes related with them. In the third section we focus on food products disputes and trade remedies. Finally, in the fourth section we draw some conclusions.

Food products and the WTO dispute settlement.

The WTO dispute settlement system is regulated by the WTO Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU). Pursuant to the rules detailed in the DSU, member states can engage in consultations concerning a trade dispute pertaining to a “covered agreement” or, if unsuccessful, have a WTO panel hear its case. So, the first stage in the WTO dispute resolution system is the consultation phase, where the complaining and respondent countries meet and attempt to negotiate a resolution. If they are unable to do so, they can request a panel, whose role is to determine whether the facts of the case show a violation to a WTO agreement. Other WTO members with an interest in the dispute can join the process at this stage as an ‘interested third party’. The panel hears the evidence and issues a legal ruling. If either of the primary countries is unhappy with any aspect of the panel’s rulings, it can appeal the case to the WTO’s Appellate Body, which will issue a final decision. At that point, if a country’s policy has been found to be in violation of its WTO obligations, it is supposed to bring its policy into compliance.

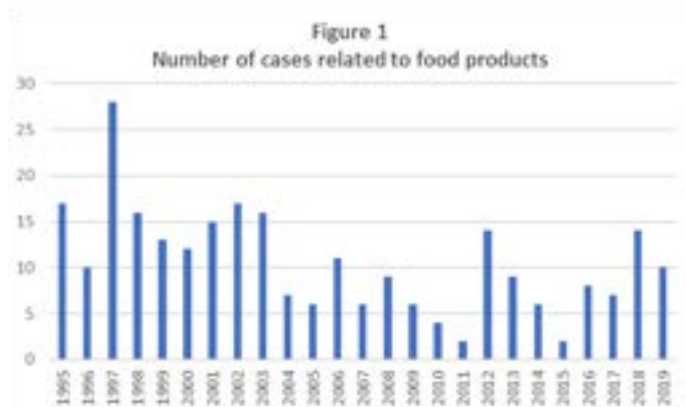
In this paper we are interested in analyzing those disputes that involve “food products”. Our definition of food products is a traditional one, including all products considered in chapters 1 to 24 of the Harmonized Commodity Description and Coding System, generally referred to as “Harmonized System” or simply “HS”. Our product coverage, then, differs from that adjoined in Annex 1 of the Agreement of Agriculture¹²¹. On the other hand, we focus on those disputes that affect food products either directly or indirectly, i.e. those disputes that refer to particular food products, like sugar, olives, bovine meat and tomatoes, for example, and at the same time those disputes that, although do not refer to a particular food product, can have consequences on their trade, such as disputes related to additional duties, tariff measures and systemic trade remedies measures, for instance, without distinction of particular goods. Finally, the figures presented in this paper are based on information published by the WTO on its official website and deals only with inter-governmental disputes under the DSU, and not with other types of dis-

121. As a consequence, our definition includes fish and fish products and excludes mannitol, sorbitol, essential oils, albuminoidal substances, modified starches, glues, finishing agents, hides and skins, raw silk, silk waste, wool and animal hair, raw cotton, waste and cotton carded or combed, raw flax and raw hemp, all products that are covered by the Agreement of Agriculture.

putes settlement mechanisms provided for by the WTO system¹²².

Taken into account this framework, between January 1st, 1995, when the WTO dispute settlement system became functional, and January 31st, 2020, the system has dealt with 594 requests for consultations or disputes. After a detailed examination of each one of these cases, we concluded that 265 of them are related to food products in the terms defined previously, either directly or indirectly. This figure represents 45% of total disputes, allowing us to affirm that almost half of the total cases under the WTO dispute settlement covers food products. The first implication of this result is that the WTO dispute mechanism is of substantial interest for international trade on food products.

Figure 1 presents the 265 cases by the year when the consultation was requested. We find a high number of cases during the first few years of the WTO, with the numbers going down gradually after year 2003. The explanation for this trend during this period is probably that in the period leading up to the conclusion of the Uruguay Round, when it was clear that a more effective dispute settlement system, compared to that of the GATT, was likely to take effect soon, many potential complaints were put “on hold” awaiting the new system. Once the new mechanism came into effect and proved itself during its first year of activity, many of those complaints were filed. One could also speculate that the proper functioning of the system, probably also clarified some unclear provisions and deterred states from disregarding their obligations, which in turn led to less complaints and requests for consultations after 2003. It is interesting to note that the number of disputes rises again in the years after the economic and financial crises of 2008 and in period 2016 – 2019 when trade conflicts among the major trading nations upraised.



Source: Author upon WTO website.

122. For instance, the WTO Agreement on Preshipment Inspection provides in Article 4 for “independent review procedures” to resolve disputes between preshipment inspection entities and exporters, and the Agreement on Government Procurement, in Article XVIII, provides for domestic review procedures, either judicial or administrative, where a supplier can challenge a decision by a government procurement entity.

As previously explained, a dispute arises when a member government believes another member government is violating a WTO agreement. The complaining member or “complainant” must submit a request for consultations identifying the agreements it believes are being violated by the other member or “respondent”. A dispute can be, and often is, brought under more than one agreement. This is clearly the case of the 265 disputes related with food products, where in most of them more than one WTO agreement is cited as being violated in the request for consultations. For example, almost all the disputes that cite the Agreement of Agriculture, also cite one or more additional WTO agreements. Furthermore, it is frequent to find disputes that cite just one or two articles of the Agreement of Agriculture to be violated and at the same time cite many articles from other agreements, such as the Agreement on Implementation of Article VI (Antidumping Agreement) and/or the Agreement on Subsidies and Countervailing Measures (SCM Agreement) and/or the Agreement on the Application of Sanitary and Phytosanitary Measures (the “SPS Agreement”), for example.

Table 1 below shows some agreements cited in the request for consultations or disputes, both for the total number of cases during the period of 25 years and for the food products related cases. We focus on the following agreements: the Antidumping Agreement (ADA), the SCM Agreement, the Agreement on Safeguards, the Technical Barriers to Trade (TBT) Agreement, the SPS Agreement and the Agreement on Agriculture. Nevertheless, the following agreements are also cited in the food products related cases: Customs Valuation, Trade Facilitation, Dispute Settlement Understanding, GATT 1994, Import Licensing, TRIPS, Protocol of Accession, Preshipment Inspection, TRIMS, Rules of Origin, GATS.

Table 1: WTO agreements cited in the request for consultations

WTO Agreement	All disputes		Food products disputes	
	Number of cases	% total	Number of cases	% total
ADA	133	22	40	15
SCM	130	22	40	15
Safeguards	61	10	22	8
TBT	55	9	42	16
SPS	49	8	46	17
Agriculture	84	14	80	30
Total	594	-	265	-

Source: Authos upon WTO website.

Of the 594 cases brought to the WTO between 1995 and January 2020, the United States filed 124 cases against other WTO members, and 155 cases were brought against the United

States. The United States and the European Union are the main users of the dispute settlement system, participating either as complainants or respondents in a total of 279 and 190 cases, respectively. The main targets of US litigation have been China and the European Union, while the European Union and Canada have been the leading complainants about US practices, accounting for about one-third of the cases against the United States. These WTO complaints cover a broad range of US practices, including subsidies, tariff rate quotas, export restraints, sanitary and phytosanitary measures, safeguards, antidumping, and countervailing duties (Schott and Jung, 2019).

We are interested, on one hand, in the trade remedies cases. From Table 1 we can notice that 324 disputes cite the trade remedies agreements (ADA, SCM and Safeguards) in the request for consultations, representing 54% of total disputes, i.e., half of total disputes in the 25 years period of the DSS deals with trade remedies. In the case of the food products related cases, 102 disputes cite trade remedies agreements, amounting to 38% of total, i.e., approximately one of three food products disputed is related with trade remedies. The TBT agreement is also relevant in the disputes of food products with 42 cases, cited in 16% of total food related disputes. The SPS agreement is significant as well in the analyzed disputes, representing 17% of total. Note that TBT and SPS agreements are predominantly cited in food products disputes. Finally, the Agreement on Agriculture accounts for 30% of food products related disputes.

Food products disputes and trade remedies.

Trade remedies concern trade in goods and provide rules permitting member states to apply remedial import measures in the form of countervailing duties, antidumping duties, price undertakings or safeguard measures¹²³. In addition to disputes concerning subsidies, antidumping and safeguards issues, WTO dispute settlement has been invoked to address other types of trade remedies, as for example US measures under Section 301 of the Trade Act of 1974 or under Section 337 of the Tariff Act of 1930.

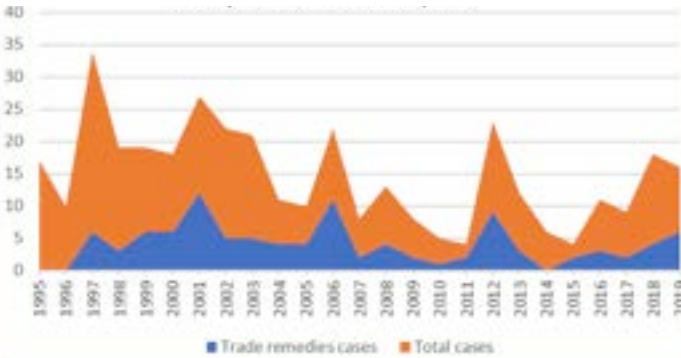
The trade remedies area has been the focus of a significant number of disputes under the WTO Agreement. Indeed, as illustrated by Table 1, almost half of all disputes or consultations addressed a trade remedy instrument. In the case of food products related cases, little more than one third of all these disputes refer to trade remedies. This fact is illustrated in Figure 2, where we plot both all food products related disputes and the subset concerning trade remedies. We can see that the “blue area” overlaps in approximately one third of total food products related cases and also that both areas have similar contour lines. That such a

123. The SCM, Antidumping and Safeguards Agreement and the relevant provisions in GATT 1994 permit member states to take remedial measures in response to certain trade disputes. The SCM and the Antidumping Agreements allows countries to remedy subsidies and dumping, respectively, by imposing duties on imported products. The Safeguards Agreement authorizes member states to apply safeguards measures to an imported product base on a determination that the product is being imported in such increased quantities and under such conditions that it causes or threatens to cause serious injury to the domestic industry. Unlike countervailing or antidumping duties which apply to a particular product from a particular country, safeguards measures are applied to imported products regardless of their source.

large share of the WTO dispute settlement caseload involving challenges to antidumping, countervailing duties and safeguards is perhaps not surprising, given the cross-country proliferation of contingent protection.

It is interesting to recall that the WTO system had been in place for 18 months before the first formal challenge to America’s use of trade remedies. In this first case, the complainant was the Mexican government and the dispute was over antidumping duties on Mexican tomatoes. After that slow start, challenges to US’s use of trade remedies quickly mounted. WTO members filed disputes also over US safeguard tariffs, where food products were also relevant, for example wheat gluten and lamb. The US also faced disputes over its use of countervailing duties, where food products were also relevant. Beginning in 1997, Chile, the European Union, Canada, and India challenged a series of US antisubsidy tariffs imposed on their exports of salmon and live cattle, for example (Bown and Keynes, 2020).

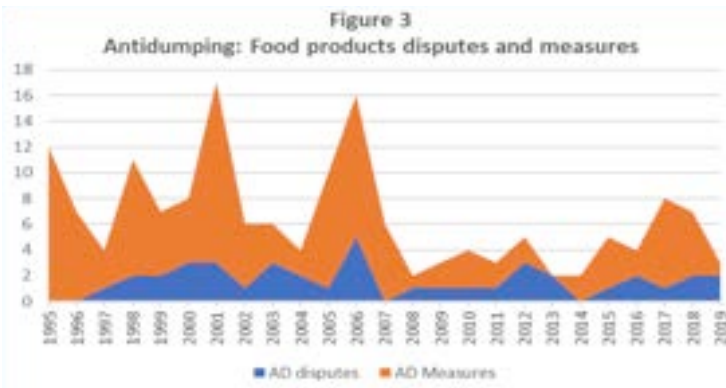
Figure 2. Food products related disputes



Source: Author upon WTO website.

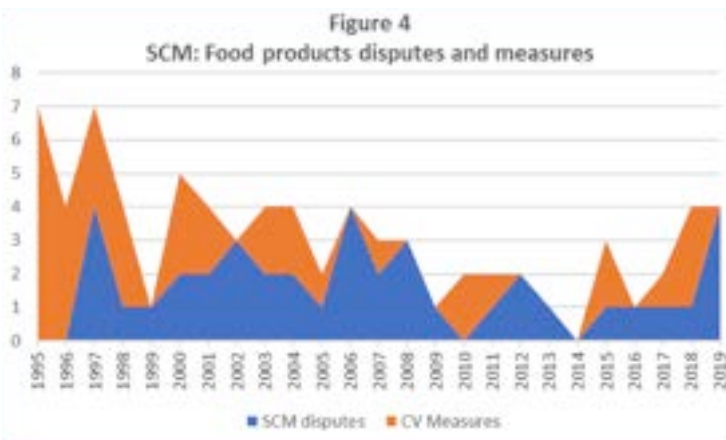
Other relevant question is: how are food product disputes related with trade remedies measures in these products? Is it the case that few trade remedies measures in food products are brought into consultations? Or, by contrast, most of trade remedies measures in these goods are being disputed into the DSS? To answer these questions, we represent graphically both trade remedies measures applied on food products during the last 25 years together with the number of food products related disputes. Figures 3, 4 and 5 show this relation for the case of antidumping, SCM and safeguards, respectively.

Figure 3. Antidumping: Food products disputes and measures



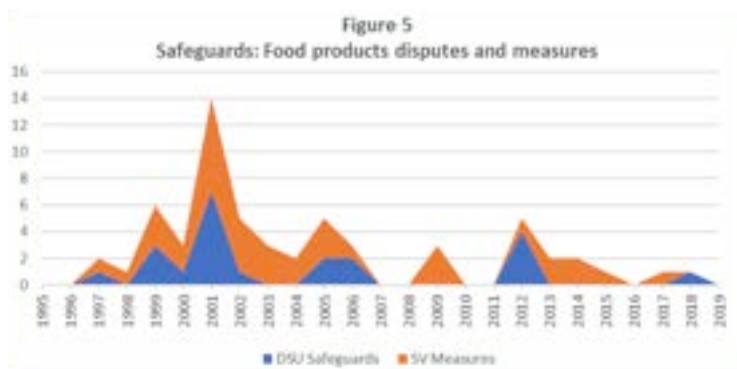
Source: Author upon WTO website.

Figure 4. SCM: Food products disputes and measures



Source: Author upon WTO website.

Figure 5. Safeguards: Food products disputes and measures



Source: Author upon WTO website.

As we can see from the three figures, SCM disputes on food related products represent an important share of SCM measures on food products, since disputes overlap an important portion of measures. We find a similar case, although less marked, regarding safeguards, where in some years the overlap is significant. In antidumping, the measures of food products surpass to a great extent the number of complaints or disputes in this kind of products. We can conclude that in relative terms trade remedies measures on food products are more intensive on SCM, followed by Safeguards.

Another question that we can pose is: who are the main users of the dispute settlement system in the cases of trade remedies for food products? In Table 2 below we present the respondents and the complainants in food products disputes related with trade remedies. It is important to remember that only WTO member states can initiate a dispute settlement procedure under the DSU (complainants), and only states can serve as respondents to such procedures. The table shows that the United States and the European Union are by far the biggest users of the system in the case of food products, as it is also the case for the total of the disputes. The United States accounts for 40% of cases as respondent and 12% of disputes as complainant. On the other hand, the European Union represents 14% of trade remedies disputes on food products as respondent and 16% as complainant.

Table 2: Respondents and Complainants in food product disputes, 1995 - 2019. Number of cases.

Member State	As Respondent				As Complainant			
	AD	SCM	SV	Total	AD	SCM	SV	Total
United States	22	16	3	41	6	6	3	15
European Union	4	7	3	14	7	9	3	19
Mexico	4	3	0	7	1	2	1	4
China	1	4	1	6	3	2	0	5
Canada	1	3	0	4	3	6	0	9
Chile	1	0	8	9	1	2	2	5
Argentina	1	3	5	9	2	0	5	7
India	1	3	0	4	2	2	0	4
Brazil	0	0	0	0	4	5	1	10
Australia	0	0	0	0	1	3	1	5
Other	5	1	2	8	17	11	7	35
Total	40	40	22	102	47	48	23	118

Source: Authos upon WTO website.

Just for completeness, let's look to the Appellate Body Reports. To date the AB has issued 158 reports, 61 of them related to food products (39% of total). Table 3 shows that trade remedies sum up 24 cases (also 39% of total), reaffirming the importance of food products and contingent protection in the dispute settlement system.

Table 3: WTO agreements cited in AB Reports for food products disputes

WTO Agreement	Number of cases	% total
ADA	11	18
SCM	7	11
Safeguards	6	10
TBT	7	11
SPS	11	18
Agriculture	19	31
Total	61	100

Source: Authos upon WTO website.

Finally, we take a look to the main users of the AB instance. Table 4 shows clearly that the United States and the European Union are the most active members as appellants, but also as appellees¹²⁴.

124. Since each dispute can have more than one appellant and more than one appellee, the total number of cases exceeds the total of 61 cases.

Conclusions.

From the previous analysis we can conclude that the WTO dispute settlement system is substantial for trade in food products. We can also affirm that almost one third of disputes related with food products are concerned with trade remedies or contingent protection. In this sense, regardless of whether the WTO's dispute settlement process and institutional framework was designed to handle substantial litigation over nationally imposed trade remedies, it currently finds disputes over trade remedies as a central topic of concern. One implication of the global trend in administered use of contingent trade policy protection is that how the DSU resolves conflicts over antidumping, countervailing duties and safeguards is an important factor in determining at least the perception of the WTO's broader record of success in the multilateral trading system. A large and increasing share of the dispute settlement caseload involves challenges to nationally imposed trade remedies over imports.

The WTO dispute settlement system was created by and for its members to preserve the important commitments made in the WTO Agreement. Whether that system can produce reasonable and accurate decisions is most likely a function of many factors, including the ability and resources of trade negotiators during negotiations, government representatives involved in particular disputes, and panelists or Appellate Body members drafting decisions. The system has until now been very busy, which would seem to reflect that member states have confidence in the ability of the system to resolve disputes and to uphold their rights under the trade bargain embedded in the WTO agreements. At the same time, the system is far from perfect and there is a keen interest of many member states to improve its effectiveness and solve some problems that have emerged.

Today, the dispute settlement mechanism is in crisis. WTO members have failed to negotiate updates to the rulebook, including rules on dispute settlement itself. As a result, the WTO Appellate Body increasingly is asked to render decisions on ambiguous or incomplete WTO rules. Its interpretations of such provisions have provoked charges by the WTO members that binding Appellate Body rulings ("judicial overreach"), which establish precedents for future cases, effectively circumvent the prerogative of member countries to revise the WTO rulebook and thus undercut the national sovereignty of WTO members.

Nowadays, the Appellate Body do not have enough members to review cases. As a consequence, the WTO had lost its system of final appellate review. Aggrieved countries would then lose their legal rights under WTO rules. WTO panels will still be able to adjudicate disputes but, if either side exercises its WTO right to appeal, the rulings will be in an indefinite legal limbo pending conclusion of the appeals process. Failure to resolve this crisis runs the risk of returning the world trading system to a power-based free-for-

all, allowing big players to act unilaterally and use retaliation to get their way. In such an environment, less powerful players would lose interest in negotiating new rules on trade. Self-help in the form of unilateral actions would become the operating principle of the world trading system (Payosova et al, 2018).

Without a functioning Appellate Body but with the continuing right to appeal panel rulings, the system of WTO adjudication will resemble its predecessor under the GATT to the extent that either the complainant or respondent can block the resolution of disputes. In the GATT era, the dispute settlement system broke down when major trading powers, the United States and the European Communities, each blocked panel rulings favoring the other side in several high-profile bilateral disputes.

The Appellate Body impasse will soon damage not only the WTO's judicial function but also its viability as a negotiating forum. In practice, there are few options for resolving the crisis unless WTO members commit to new approaches to updating and clarifying WTO rights and obligations. The WTO Dispute Settlement is a public good that must be preserved and improved through negotiations.

As we showed in this paper, the WTO Dispute Settlement is crucial for international trade of food products. For food products, as well as for the rest, the best solution to the current crisis is constructive discussions and negotiations.

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WTO Dispute Settlement Cases Involving Latin American countries and the Agreement on Agriculture, 1995-2019

Anabel González and Joseph W. Glauber

Latin America, as a lead exporter of agricultural products, has a significant interest in open global markets. The region's agriculture trade surplus has increased to US\$54 billion in 2016-2018 from US\$12 billion in 1996-1998. Brazil and Argentina, the first and second top agricultural and food exporters in the region, rank third and tenth worldwide and lead world exports of soybeans, maize, vegetable oils, sugar, poultry and beef. Mexico, Chile, Ecuador, Peru and some Central American countries have also seen significant dynamism in their exports of fruits and vegetables (OECD-FAO, 2019).

In light of the region's strong export performance, and the long-standing contentious nature of agriculture in the global trading system, it is no surprise that Latin American countries are some of the most active participants in the World Trade Organization (WTO) dispute settlement mechanism in the agriculture area¹²⁵. The system has worked well not only by helping to sort out some intractable conflicts but also by providing greater clarity on the interpretation of the Agreement on Agriculture (AoA) and guiding governments in crafting WTO-consistent agricultural policies (Glauber and Xing, 2020).

But since 10 December 2019, the WTO's Appellate Body, one of the critical features of the mechanism, is unable to hear new appeals and its paralysis significantly hampers the predictability and effectiveness of the system (Payosova et al, 2018, Bown and Keynes, 2020; Hoekman and Mavroidis, 2019). It may also negatively impact the WTO-rule making function as governments hesitate to negotiate novel disciplines in the context of weakened implementation. For Latin American agricultural interests, this is not good news. An effective rules-based system that further disciplines trade policies, facilitates market access and strengthens enforcement is critical to secure open world agricultural markets.

125. For a description of the WTO dispute settlement system see WTO, Introduction to the WTO Dispute Settlement System https://www.wto.org/english/tratop_e/dispu_e/dispu_settlement_cbt_e/c1s1p1_e.htm (accessed March 9, 2020)

This chapter presents descriptive statistics of the WTO disputes relating to the AoA in which Latin American countries have participated from 1995 to 2019 with a view to assessing the importance of the system for the region. It is organized as follows: section 1 provides statistics on Latin American countries' participation in the dispute settlement mechanism in cases related to the AoA; section 2 presents statistics on the disposition and outcomes of those disputes; and section 3 presents the main conclusions of the study.

Latin American countries' participation in WTO agricultural disputes

Agriculture is a contentious topic in the WTO, on par with antidumping and countervailing measures. While the focus of this chapter is specifically the AoA, when taken together with the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS agreement), there are cumulatively 133 dispute settlement cases, out of a total of 593 in the period 1995-2019, in which agriculture-specific rules have been cited in WTO dispute settlement cases; the comparable number is the same with respect to the Agreement on Antidumping and 130 in the case of the Agreement on Subsidies and Countervailing Measures¹²⁶. Only the General Agreement on Tariffs and Trade 1994 (GATT 1994), the WTO main agreement on trade in goods, gets cited in more disputes (490 cases), some of which also involve agricultural products¹²⁷.

In the case of the AoA in particular, its provisions have been invoked in 84 requests for consultations or 14 percent of all requests submitted by WTO members from 1995 to 2019¹²⁸. Latin American countries have played a significant role in the system, having been engaged as parties in 32 of all those agriculture disputes or 38 percent of them¹²⁹. Countries in the region have acted as complainants in 24 of those cases, i.e., in 29 percent of all AoA-related disputes, and have served as respondents in 14 cases or 17 percent of all controversies involving this agreement (see table 1 and figure 1). The AoA is also relevant to the region's participation in the dispute settlement system in that it has been invoked in 19 percent of all cases Latin American countries have taken to the WTO, i.e., in almost 1 out of 5 disputes; the agreement has also been mentioned in 14 percent of all cases in which the region has served as respondent (see figure 2).

126. WTO, Disputes by agreement https://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm (accessed March 11, 2020).

127. One or several of the WTO agreements may be invoked in each controversy.

128. A request for consultations is the first step in activating the dispute settlement mechanism, as per Article 4 of the WTO Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU).

129. While Latin American countries have also participated as third parties in disputes initiated by other WTO members, this study is focused on their participation as parties (complainant or respondent) in the AoA-related cases.

Table 1. Request for consultations invoking the AoA involving Latin American countries, 1995-2019

WTO/ DS No.	Complainant	Respondent	Title
DS22	Philippines	Brazil	Brazil – Desiccated Coconut
DS27	Ecuador, Guatemala, Honduras, Mexico, US	EC	EC – Bananas III
DS35	Argentina, Australia, Canada, New Zealand, Thailand, US	Hungary	Hungary - Export Subsidies in Respect of Agricultural Products
DS69	Brazil	EC	EC – Poultry
DS111	Argentina	US	US - Tariff Rate Quota for Imports of Groundnuts
DS183	EC	Brazil	Brazil - Measures on Import Licensing and Minimum Import Prices
DS197	US	Brazil	Brazil - Measures on Minimum Import Prices
DS203	US	Mexico	Mexico - Measures Affecting Trade in live Swine
DS207	Argentina	Chile	Chile – Price Band System
DS220	Guatemala	Chile	Chile - Price Band and Safeguard Measures Relating to Certain Agricultural Products
DS237	Ecuador	Turkey	Turkey - Certain Import Procedures for Fresh Fruit
DS266	Brazil	EC	EC – Export Subsidies on Sugar
DS267	Brazil	US	US – Upland Cotton
DS275	US	Venezuela	Venezuela - Import Licensing Measures on Certain Agricultural Products
DS293	Argentina	EC	EC – Approval and Marketing of Biotech Products
DS298	Guatemala	Mexico	Mexico - Certain Pricing Measures for Customs Valuation and other Purposes
DS314	EC	Mexico	Mexico - Provisional Countervailing Measures on Olive Oil from the EC
DS329	Mexico	Panama	Panama - Tariff Classification of Certain Milk Products
DS341	EC	Mexico	Mexico – Olive Oil
DS365	Brazil	US	US - Domestic Support and Export Credit Guarantees for Agricultural Products
DS388	Mexico	China	China - Grants, Loans and Other Incentives
DS390	Guatemala	China	China - Grants, Loans and Other Incentives
DS438	EU	Argentina	Argentina – Import Measures
DS446	Mexico	Argentina	Argentina - Measures Affecting the Importation of Goods
DS451	Mexico	China	China - Measures Relating to the Production and Exportation of Apparel and Textile Products
DS457	Guatemala	Peru	Peru – Agricultural Products
DS484	Brazil	Indonesia	Indonesia - Chicken

DS506	Brazil	Indonesia	Indonesia – Measures Concerning the Importation of Bovine Meat
DS507	Brazil	Thailand	Thailand – Measures Concerning Sugar
DS568	Brazil	China	China – Certain Measures concerning Imports of Sugar
DS579	Brazil	India	India – Measures concerning Sugar and Sugarcane
DS581	Guatemala	India	India – Measures concerning Sugar and Sugarcane

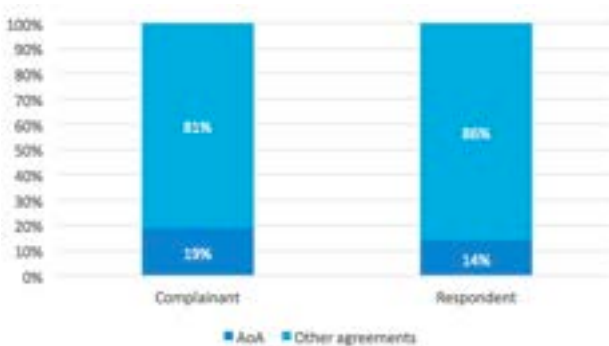
Source: World Trade Organization, 2020.

Figure 1. Participation by Latin American countries and other WTO members in cases involving the AoA, 1995-2019



Source: World Trade Organization, 2020.

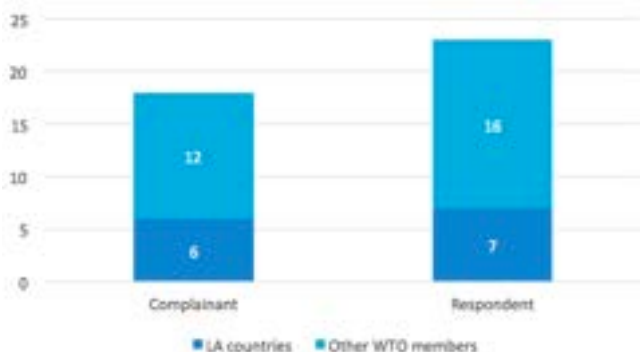
Figure 2. Share of Latin American countries WTO disputes involving the AoA, 1995-2019



Source: World Trade Organization, 2020.

Litigation on agriculture trade in the WTO is concentrated in a few members, with a strong participation from Latin American countries. Eighteen WTO members, out of 164, have activated the 84 dispute settlement cases involving the AoA, of which six are Latin American countries; of the 23 members serving as respondents, seven of them come from the region (see figure 3)¹³⁰. That is, six Latin American countries have activated 29% percent of all WTO cases pertaining to the AoA, led by Brazil acting as complainant in nine cases, followed by Guatemala in six cases, Mexico in five, Argentina in four, Ecuador in 2 and Honduras in one case¹³¹. Mexico is the Latin American member that has figured as respondent in the largest number of disputes (four), followed by Brazil with three cases, Argentina and Chile with two cases each, and then Panama, Peru and Venezuela, with one controversy each (see figure 4).

Figure 3. Participation by Latin American countries and other WTO members in cases involving the AoA, 1995-2019

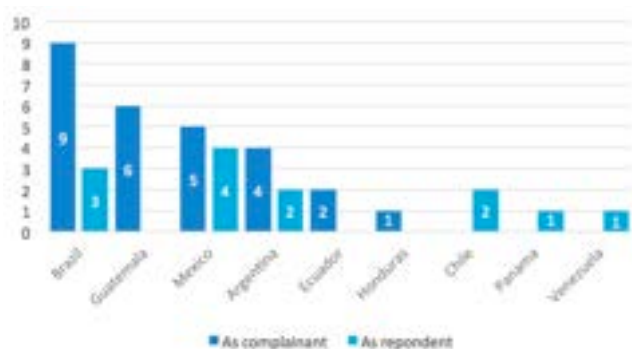


Source: World Trade Organization, 2020.

130. Caribbean countries have not participated as complainants or respondents in cases associated with the AoA but have intervened as third parties in important disputes related to preferential access to the European market (DS27, European Union. Regime for the Importation, Sale and Distribution of Bananas and DS266, European Union – Export Subsidies on Sugar). See WTO, Disputes by agreement https://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm (accessed March 11, 2020).

131. While there are 24 agriculture cases in which Latin American countries have acted as complainants, four Latin American countries participated as complainants against the European Union in the same dispute related to the adoption of the EU-wide banana import regime (DS27, European Union. Regime for the Importation, Sale and Distribution of Bananas), which is why Latin American countries are counted as complainants 27 times. See WTO, Disputes by agreement https://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm (accessed March 11, 2020).

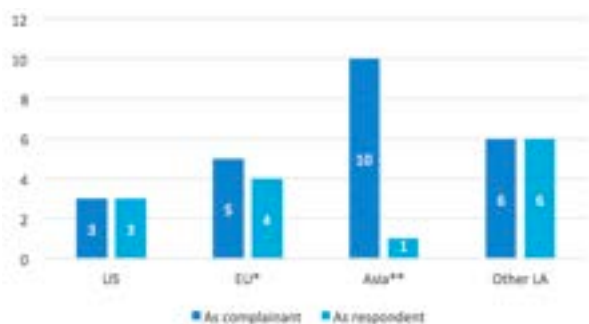
Figure 4. Participation by individual Latin American countries in cases involving the AoA, 1995-2019



Source: World Trade Organization, 2020.

Latin American countries have activated the greatest number of cases involving the AoA against countries in Asia (10), in particular against China, Indonesia, India and Thailand. Countries in the region have also litigated against each other to sort out agriculture disputes in 6 cases, including against Mexico, Argentina, Chile, Venezuela, Panama and Peru, in five cases against the European Union and in three against the United States (see figure 5).

Figure 5. Counterparts in Latin American cases involving the AoA, 1995-2019



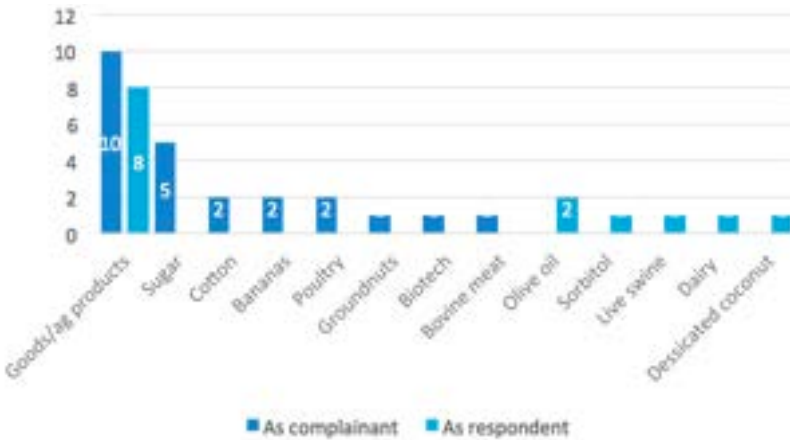
Source: World Trade Organization, 2020.

(*) Latin American cases against the EU includes one case against Hungary (DS35).

(**) Latin American cases against Asia includes one dispute against Turkey (DS237).

In terms of the products at issue in the Latin American countries' agricultural disputes, cases that refer to import restrictions, price bands, export subsidies and others tend to apply to all goods, all agricultural goods or several commodities at the time (e.g., Chile's price band system applied to wheat and wheat flour, sugar and edible vegetable oils), both when countries act as complainants and as respondents. A number of cases, however, are product specific. When Latin American countries act as complainants, cases tend to address either entrenched restrictions in the United States (cotton) or the European Union (sugar, bananas, poultry) or, more recently, in emerging markets (sugar in China and India or poultry and bovine meat in Indonesia) (see figure 6).

Figure 6. Products at issue in Latin American countries agriculture cases, 1995-2019



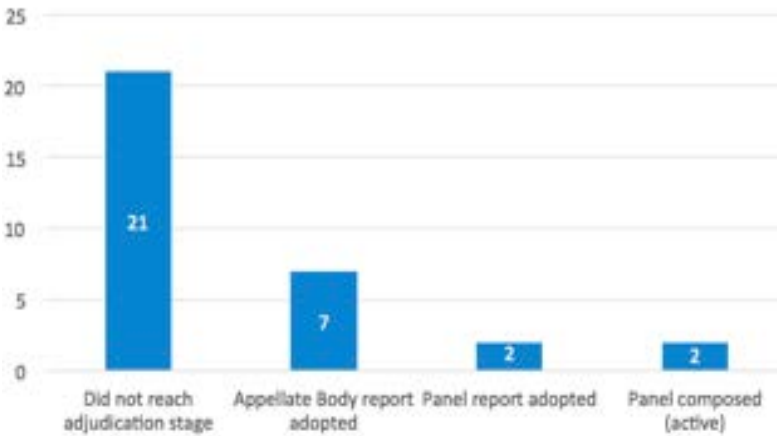
Source: World Trade Organization, 2020.

Disposition and outcomes of agricultural WTO disputes involving Latin American countries

A majority of the agriculture cases in which Latin American countries have been involved were resolved without the need to proceed to the panel adjudication stage. Specifically, 21 of 32 of these disputes (66 percent) did not result in the establishment of panels but were settled (or withdrawn) mostly during the consultation stage or after the panel was established. In two cases a panel report was adopted by the Dispute Settlement Body, with-

out appeal, whereas seven other cases were subject to appeal, with the report being adopted thereafter (see figure 6). In the two most recent cases (DS 579 and DS 581, both related to India's measures concerning sugar and sugar products), the panel has been composed and the process is ongoing¹³².

Figure 6. Disposition of WTO agriculture disputes involving Latin American countries, 1995-2019



Source: World Trade Organization, 2020.

Of the nine agricultural cases in which there was a panel or an Appellate Body report, the complainants made a total of 110 separate claims¹³³. Of those claims, the panels ruled in favor of complainants in 63 claims (57 percent), in favor of the respondent in 19 claims (17 percent) and declined to make a ruling due to judicial economy in 28 claims (25 percent). If only the claims on which the panel ruled for the complainant or the respondent are considered, the panel ruled in favor of the complainants in 63 percent of cases (see table 2).

132. See WTO. Disputes by agreement https://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm (accessed March 11, 2020).

133. A claim is a brief summary of the legal basis of the complaint, as per Article 6.2 of the DSU. Complainants frequently raise more than one claim in the request for establishment of a panel.

Table 2. Outcome of Latin American cases involving the AoA, 1995-2019

DS No.	Complainant	Respondent	Title	Report	Rulings favoring complainants	Rulings favoring respondents	No ruling	Total claims
DS22	Philippines	Brazil	Brazil – Desiccated Coconut	Appellate Body	0	0	4	4
DS27	Ecuador, Guatemala, Honduras, Mexico, US	EC	EC – Bananas III	Appellate Body	7	0	0	7
DS69	Brazil	EC	EC – Poultry	Appellate Body	2	6	0	8
DS207	Argentina	Chile	Chile – Price Band System	Appellate Body	19	2	0	21
DS267	Brazil	US	US – Upland Cotton	Appellate Body	12	2	0	14
DS341	EC	Mexico	Mexico – Olive Oil	Panel	8	6	2	16
DS438	EU	Argentina	Argentina – Import Measures	Appellate Body	3	0	14	17
DS457	Guatemala	Peru	Peru – Agricultural Products	Appellate Body	2	0	7	9
DS484	Brazil	Indonesia	Indonesia - Chicken	Panel	10	3	1	14

Source: World Trade Organization, 2020.

In most cases in which a Latin American country acted as a complainant, most claims were “won” by the complainant and “lost” by the respondent (see table 3)¹³⁴. Finding a satisfactory solution for the complainant, however, required further action in most of the controversies. In four of the six cases won by Latin American countries, a panel was activated to decide on a reasonable period of time to implement the reports’ rulings (DS27, EC-Bananas; DS207, Chile-Price Band System; DS457, Peru-Agricultural Products; and DS484, Indonesia-Chicken)¹³⁵. In two of those cases, complainants requested compliance panels to determine whether the respondent had implemented the DSB’s recommendations

134. It is important to note the limitations of the terminology “win/lose” in legal statistics. When a respondent “loses” a case in the legal sense, it most frequently “wins” in its own economic well-being by making the errant policy WTO-consistent.

135. When it is impractical to comply with the rulings and recommendations of a report immediately, an arbitration panel may define a reasonable period of time for the respondent to comply, as per Article 21.3(c) of the Dispute Settlement Understanding (DSU).

(DS207, Chile-Price Band System and DS267, US-Upland Cotton)¹³⁶. Finally, in two disputes the respondent refused to implement the DSB recommendations, which authorized retaliation by the complainants (DS27, EC-Bananas III and DS267, US-Upland Cotton)¹³⁷. Both these cases ended several years later with mutually agreed solutions among the parties^{138 139}.

Table 3. Rulings in favor of Latin American countries in cases involving the AoA, 1995-2019

WTO Member	Disputes adjudicated by a panel		Percent of claims "won" (*)	
	As complainant	As respondent	As complainant	As respondent
Brazil	3	1	69%	0% (**)
Mexico	1 (***)	1	100%	43%
Guatemala	2 (***)	0	100%	NA
Argentina	1	1	90%	0%
Honduras	1 (***)	0	100%	NA
Ecuador	1 (***)	0	100%	NA
Peru	0	1	NA	0%
Chile	0	1	NA	10%

(*) Percentage of claims in which the panel ruled in favor of the Latin American country.

(**) In the agricultural case in which Brazil acted as a respondent (DS22, Brazil-Desiccated Coconut) the panel did not rule on any of the claims.

(***) Mexico, Guatemala, Honduras and Ecuador participated as co-complainants in DS27, European Union. Regime for the Importation, Sale and Distribution of Bananas.

Source: World Trade Organization (2020).

136. If the complainant is not satisfied with the implementation of the report's recommendations by the respondent, it can request a compliance panel to make a determination under Article 21.5 of the DSU.

137. If the respondent opts not to implement the panel findings, the complainant may suspend concessions or other obligations, as per Article 22.6 of the DSU.

138. See WTO, Disputes by agreement https://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm (accessed March 11, 2020).

139. In the case of cotton, however, the US reinstated a program in 2018 that raised objections from Brazil, which nevertheless have not been pursued further in the WTO (Glauber, 2018).

Conclusions

Brazil, Guatemala, Mexico, Argentina, Ecuador and Honduras have leveraged the WTO dispute settlement system to resolve very important agricultural trade differences with WTO members. They have cumulatively activated close to one-third of all WTO cases involving the AoA, both to seek redress in case of entrenched barriers that constrained trade with the European Union, like sugar, bananas or poultry, and with the United States, like cotton. They have also triggered the system to seek enforcement of market access rules in other Latin American countries, like in the case of Chile and Peru's price band systems, and increasingly, in emerging countries such as China, Indonesia and India, to contest market access restrictions, domestic support measures and export subsidies. In two-thirds of the controversies in which Latin American countries have acted as complainants, they have been able to resolve the disputes without activating the panel adjudication stage; of the other nine cases, seven proceeded to the appeal stage. Moreover, in most of the cases with Appellate Body report, implementation of the recommendations was controversial; in two cases, the complainants were authorized to seek retaliation before the parties ultimately reached a settlement agreement.

While repeated activation of the dispute settlement system is a measure of confidence in the system, triggering of the mechanism or a "winning" record does not provide the full picture of its effectiveness to enforce rules and market access commitments. The sole existence of a functioning enforcement mechanism provides legal certainty, without the need for formal activation, and legal jurisprudence works to extend the "shadow of the law" to cover hundreds of billions of dollars in trade each year (Bown and Reynolds, 2015). As importantly, the system also shields policymakers against domestic protectionist pressures and facilitates the adoption of WTO-consistent trade policy reforms. Most important, effective enforcement fosters sound rules and good policies across the globe, which encourages investment and economic growth, enabling a business environment conducive for firms to invest and trade to thrive (González and Jung, 2020).

As Latin American countries continue to grow their agricultural exports and penetrate new markets, including emerging markets, an effective dispute adjudication and enforcement mechanism is critical to secure enforcement of rules and market access. It also impacts the viability of WTO members to engage in further rulemaking to establish a fairer and market-oriented agricultural system. It is in the interest of Latin American countries to make a sound contribution to rescue and strengthen the WTO's dispute settlement mechanism.

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MIRAGRODEP, an analytical model adapted to economic and trade reforms

Antoine Bouët, David Laborde and Valeria Piñeiro¹⁴⁰

Introduction

The international community is facing considerable challenges today. To meet these challenges, governments, regional bodies, and international institutions must define and implement reforms that meet a triple requirement: inclusiveness, sustainability and resilience. Inclusiveness means the implementation of reforms that primarily benefit the most disadvantaged populations in terms of income, food security, and/or health status. Sustainability means the design of solutions that favor the fight against climate change and the respect of biodiversity. Resilience means finding out tools that enable economies and populations to resist external shocks (extreme climatic events, pandemics).

This triple requirement implies that decision-makers must have access to coherent tools in order to analyze ex-ante the impact of potential economic and trade reforms: carbon tax, environmental regulation, customs union or free trade area, and others. These tools must be coherent from an economic, environmental and nutritional point of view and integrate not only detailed information at the level of economic agents to respect the requirement of inclusiveness, but also a dynamic dimension to respond to the concern of resilience.

The objective of this chapter is to present a general overview of the MIRAGRODEP model, a model of the global economy. This model has the consistency of computable general equilibrium models and can include environmental considerations, while being based on detailed data that can represent not only many sectors of activity, but also many countries. It can also be linked to individual surveys to estimate the impact of shocks and reforms at the household level in terms of income, purchasing power, poverty, food security, and nutrition.

MIRAGRODEP has already been used to study issues related to international trade and trade policy: the impact of the Doha Development Agenda (Bouët and Laborde, 2010a)

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or the cost of a non-Doha (Bouët and Laborde, 2010b), the impact of the Economic Partnership Agreement between the European Union and the ECOWAS (Bouët, Laborde and Traoré, 2018), the impact of the African Continental Free Trade Area with modelling of non-tariff measures (Bouët, Laborde and Traoré, 2021) or the impact of WTO reform (Bouët and Laborde, 2019). It also served for an evaluation of export taxes (Bouët and Laborde, 2019) and export restrictions (Piñeiro et al, 2019), an estimation of the impact of non-cooperative policies in times of food crisis (Bouët and Laborde, 2012), and US tariff wars (Bouët and Laborde, 2018), of biofuels mandate (Bouët, Dimaranan and Valin, 2010; Laborde, 2011), the impact of the COVID-19 pandemic (Laborde, Martin and Vos, 2020) and agricultural subsidies and global greenhouse gas emissions (Laborde et al, 2020).

The rest of the chapter is organized as follows. Section 2 gives an overview of the MIRAGRODEP model. In section 3 we present data on which the model is based, including not only Social Accounting Matrixes, but also tariffs, export taxes, non-tariff measures and household surveys while section 4 gives an illustration of an estimation conducted with MIRAGRODEP. Section 5 concludes.

An overview of the model

Like MIRAGE (Bchir et al., 2002; Decreux and Valin, 2007) and the GTAP model (see Corong et al., 2017), MIRAGRODEP is a multi-region, multi-sector CGE model with perfect competition and constant returns to scale (see Bouët et al., 2021, for a complete documentation). It is usual to assume perfect competition in all sectors, which enables to have a detailed geographic and sector decomposition.

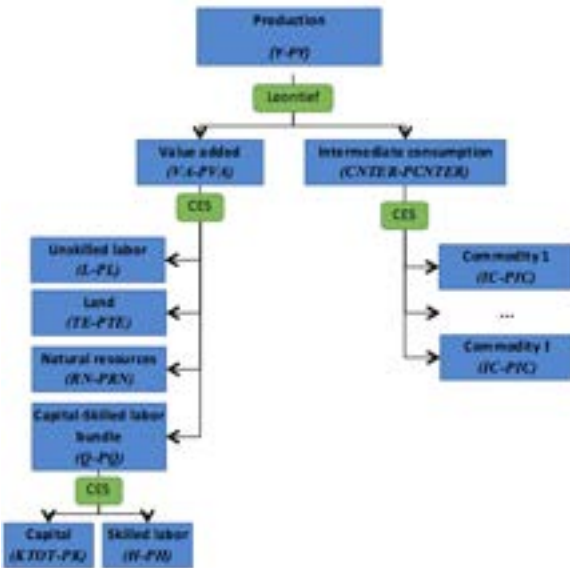
All these models (GTAP, MIRAGE, MIRAGRODEP) share common features: they are all based on an input–output framework and their theoretical structure is derived from optimizing behavior of economic agents, particularly households and firms. In all these models, Walras’s law holds: if there is equilibrium in all but one of the markets, equilibrium also holds in the last market. Consequently, one price is held fixed and all other prices are evaluated relative to this numeraire. However, each of these models also has specificities: specific choices of functional forms for the final and intermediate demand functions, treatment of international transport margins or specific duties, representation of factor markets, nesting in the Armington representation of trade preferences, and others. When studying the same policy reform using the same data, these models do not show large differences (Bouët et al, 2020 and Maliszewska and Ruta, 2020).

There is a comparative static and a recursive dynamic version of the model. The dynamic version is used by solving the model sequentially and moving the equilibrium from one year to another.

From the supply side in each sector, the production function is a Leontief function of value-added and intermediate inputs; one output unit needs x percent of an aggregate of productive factors (labor, both unskilled and skilled; capital; land and natural resources) and $(1 - x)$ percent of intermediate inputs. The intermediate inputs function is an aggregate constant elasticity of substitution (CES) function of all goods, which means that substitutability exists between two intermediate goods, depending on the relative prices of these goods. This substitutability is constant and at the same level for any pair of intermediate goods. Similarly, in the generic version of the model, value added is a CES function of unskilled labor, land, natural resources, and a bundle of skilled labor and capital. This nesting allows for the introduction of less substitutability between capital and skilled labor than between these two and other factors.

In the dynamic version, the only factor with a fixed supply over time is natural resources. Labor supply growth rates are fixed exogenously. Land supply is endogenous and depends on the real remuneration of land. Skilled labor is the only factor that is perfectly mobile. Installed capital and natural resources are sector-specific. New capital is allocated among sectors according to an investment function.

Figure 1 : Production side



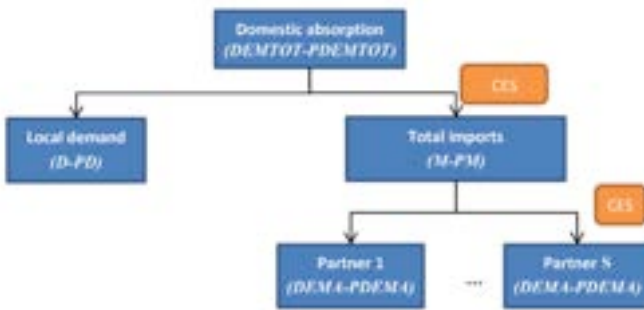
Unskilled labor is imperfectly mobile between agricultural and non-agricultural sectors, according to a constant elasticity of transformation (CET) function. Land is also imperfectly mobile between agricultural sectors.

Capital in a given region, whatever its origin (domestic or foreign), is assumed to be obtained by assembling intermediate inputs according to a specific combination. The capital good is the same regardless of the sector.

The demand side is modeled in each region through a representative agent that own all factors of production and whose propensity to save is constant. The rest of the national income is used to purchase final consumption. Preferences between goods are represented by a linear expenditure system–constant elasticity of substitution (LES-CES) function. This specific utility function allows the evolution of the demand structure of each region to be accounted for as its income level changes. Additionally, the elasticity of substitution is constant only among the sectoral consumptions over and above a minimum level. The minimal level of consumption can vary across region (e.g. developing versus developed country).

MIRAGRODEP is a bilateral trade model consistent with the Armington assumption: commodities are assumed to be heterogeneous according to their origin, and thus, imperfect substitutes for one another (Armington 1969). Nested CES functions are used to reflect preferences among varieties originating from different countries. Therefore, countries can export and import the same product at the same time due to consumer preferences for different varieties. The price transmission between domestic and international market is imperfect and highly dependent on the choice of the CES trade elasticities and the initial share of trade. For the latest studies, Armington elasticities are drawn from the GTAP 11 database and are adjusted for each region based on sectoral composition. The import tree is specific to each market (importer*sector) to reflect the export similarities (HS4 level) of each exporter.

Figure 2: Demand side



In MIRAGRODEP, the government is explicitly modelled as different from private agents. Government income consists of taxes collected on production, on factors of production, on exports, on imports, on consumption, and on households' income. The govern-

ment is supposed to maximize a Cobb-Douglas utility function: government spending on each commodity is a fixed share, in value, of total public expenditure in goods and services. Government purchases are subject to taxes.

The model includes four important assumptions: the external account closure, the private account closure, the government account closure and the factor market closure.

The private account closure assumption concerns the savings-investment closure. The MIRAGRODEP model is Neo-Classical: the marginal propensity to save is constant such that variation in income leads to variation in savings, which brings variations in investment.

The external account closure concerns the assumption on the current account. This account balance could be affected by a trade shock since this policy reform entails a variation of border tariffs and consequently a variation of imports and exports. One option is to suppose that the current account balance varies, and the real exchange rate is unaffected by the reform. A second option is to suppose that the real exchange is affected by the reform in such a way that the current account balance is constant. The adjustment of the real exchange rate could take place through an adjustment of the nominal exchange rate (devaluation, depreciation) or through different evolutions of domestic prices in the different regions (i.e., competitive disinflation).

The first option (rigidity of the real exchange rate and modification of the current account surplus or deficit) has two significant disadvantages. If a country's current account balance, which includes the trade balance, is modified by the shock, this means that the adjustments in the upper part of the balance of payments have to be compensated for by a modification of the capital and financial account balance. However, MIRAGRODEP does not model financial markets¹⁴¹ so there is no explicit representation of how capital flows will be reallocated at the global level following the agreement or how the sovereign risks of the countries, and the propensity of investors to allocate resources to these countries, will evolve.

Secondly, if it is assumed that a current account balance can vary without constraints, it means that there is no limitation in the increase of import. In this case, the country's consumption, and welfare, is "subsidized" through transfers from the rest of the world. Therefore, a welfare analysis is biased: increasing the external debt has no negative consequence on welfare, while the additional imported consumption increases welfare.

The second option (exogenous behavior for the current account surplus or deficit, by default) is our preferred one and it implies that the real exchange rate is adjusted in such a way that the current account balance is stable (in the model expressed as a percent of global GDP). In a nutshell, when the first-order effect of the shock is increasing imports (higher tariff reduction on the import side than on the export side), the real exchange rate is depreciated such that the competitiveness of this country is improved to ensure that additional imports will be compensated for by additional exports in value, in the long term.

141. Other multi-country CGEs face the same problem.

Conversely, when the first-order effect of the reform is increasing exports, the real exchange rate is appreciated such that the competitiveness of this country is deteriorated. The key advantage of this assumption is that we can conduct a welfare analysis which is fully representative of how the reform has affected a country's real situation. It also provides a long-run assumption consistent with the CGE analysis.

The government or public account closure assumption concerns how the public balance is affected when taxes are changed by a shock or a reform. In many studies, we assume that after a shock that impacts custom duties, a consumption tax (VAT) is adjusted to maintain real public expenses per capita constant while public sold is constant in percentage of GDP. With this assumption, the level of public services in each country is constant and there is no variation of public sold and no associated crowding-out effect on private investment. The magnitude of the additional tax measures the cost imposed on the economy to maintain constant real public expenses per capita, and consequently constant provision of public goods. In a sensitivity analysis, it is possible to consider other closures which could include changes in public expenditure and the introduction of a lump-sum tax.

An overview of data

The first source of data for MIRAGRODEP is GTAP11 database (see Aguiar et al., 2019 for full documentation), which provides world macroeconomic accounts and trade flows for four reference years 2004, 2007, 2011, 2014 and 2017. The database describes values of production, and intermediate and final consumption of commodities and services for 141 countries or regions and 65 sectors, but also global bilateral trade patterns, international transport margins and protection matrices that link individual countries/regions.

The market access data come from the MacMap-HS6 version 2.1 database (Bouët et al., 2008; Guimbard et al., 2012), which measures protection in 2004, 2007, 2010, 2013, and 2016 and includes all regional agreements and trade preferences existing to these dates. Therefore, protection is measured at the bilateral level for each HS6 line. One important feature of the model is the Consistent Tariff Aggregator approach¹⁴² which has been implemented for MIRAGRODEP. This is an important element of the model when it comes to trade shocks scenarios since the simulations are often conducted at a relatively low level of sector disaggregation (25 sectors) whereas protection is measured at a very detailed level. The Consistent Tariff Aggregator approach captures the exclusion effects and the variance of tariffs at a detailed (tariff line) level. Not considering this approach would yield inconsistent welfare effects since simple trade weights are endogenous and the welfare changes induced by a tariff is a function of it powers, not its level per se.

142. See Laborde, Martin, and van der Mensbrugghe (2016) for the importance of tariff aggregation in studying trade liberalization scenarios and a presentation of the Consistent Tariff Aggregator approach.

It is usual that MIRAGRODEP includes other data: (i) specific Social Accounting Matrix when MIRAGRODEP is used in collaboration with a specific government (Bouët, Laborde, and Traoré, 2021, for Morocco); (ii) data collected on export taxes for a specific project (Bouët and Laborde, 2013); (iii) evaluation of Ad Valorem Equivalent of Non-Tariff Measures (Bouët, Laborde, and Traoré, 2021).

Last, not least, MIRAGRODEP can be connected to households' surveys: Laborde, Martin, and Vos (2020) conduct two simulations of the economic consequences of COVID-19; to estimate the poverty impact of the shock, MIRAGRODEP is connected to the POVANA household dataset and model, which includes data on the full income distribution for over 300,000 representative households globally. The model and the dataset are linked in top-down fashion.

TRADE TENSIONS IN LAC: MODELING OUTCOMES¹⁴³

Trade tensions between the major world economies increased in 2018, and US tariff increases triggered reprisals and counter-reprisals. In Latin America and the Caribbean (LAC), trade tensions between the US and China and other US trade partners were expected to generate a mix of opportunities and threats for exporters of food products.

To better understand the likely impacts of global trade tensions for LAC, we modeled a set of four scenarios using the MIRAGRODEP model. We looked at impacts on exports, imports, production, GDP, household consumption, and adjustment costs through changes in labor markets up to 2030.

Impacts will differ across the region's highly heterogeneous countries, but some broad trends are evident.

In the short-term...

LAC countries enjoy an advantage as the trade war allows them to replace either US or Chinese exports on their reciprocal markets.

- The ripple effect from the escalation of tariffs and reduction of US food exports to China could open new export opportunities.

In the long-term...

A prolonged period of moderate trade expansion would slow increases in productivity and longer-term growth prospects, reflecting (1) investment decisions that could increase global distortions and (2) a risk of increased competition (and potential dumping) as US exporters displace producers within LAC and commodity prices drop.

- An economic slowdown in China and/or the United States could reduce demand for commodities.

What should be the region's strategy?

The impact in Latin America of the US–China trade dispute and the resulting reordering of the world economy forces us to think about new strategies. While the level of intra-LAC heterogeneity could be a major challenge to defining a collective action agenda, it could also be a great asset. Our modeling exercise shows that a LAC mitigation strategy focused on intraregional trade could help the region avoid the negative impacts of current trade tensions.

For more details of this study, see D. Laborde and V. Piñeiro, "Trade Tensions: Implications for Latin America and the Caribbean," IICA and IFPRI, 2019.

143. This section is based on Laborde Debucquet, David; and Piñeiro, Valeria. 2019. Trade tensions in LAC: Modeling outcomes. Washington, DC: International Food Policy Research Institute (IFPRI). <http://ebrary.ifpri.org/cdm/ref/collec-tion/p15738coll2/id/133561>

IMPACTS OF GLOBAL TRADE TENSIONS: FOUR SCENARIOS

1 US vs. China: Status quo

Tariffs proposed and/or implemented by the US and Chinese governments up to December 2018, including agricultural and non-agricultural products.



2 Extended US trade tensions

Proposed and implemented tariffs plus all retaliatory measures announced by the US and China, US steel and aluminum tariffs, and the retaliatory measures from Canada, the European Union, India, Mexico and Turkey.



3 Escalating trade wars

Escalation to full-blown trade wars.



4 Intra-LAC integration

Status quo trade tensions plus a LAC mitigation strategy that reduces transportation costs and increases intraregional integration.



Conclusion

This chapter has introduced the MIRAGRODEP model. It is a multi-country, multi-sector computable general equilibrium model -static and dynamic versions- that is regularly used for economic and trade reform assessments.

Despite its many uses, the MIRAGRODEP model needs to evolve and incorporate new elements to maintain its relevance in a constantly changing environment. For example, it is necessary to integrate more detailed information on trade costs (access costs to national markets, efficiency of customs procedures, unequal quality of transport infrastructures, among others), firms (with the evolution of international trade theory and the recognition of their differentiation, information on firms is increasingly available), and households. Environmental and nutritional considerations must also be integrated into the model and the model must evolve to study resilience issues. This is the only way that the MIRAGRODEP model can continue to be a reference for the evaluation of economic and trade reforms.

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Some thoughts and proposals for a way forward

Adriana Campos, Valeria Piñeiro y Martin Piñeiro

The WTO XII Ministerial Conference (MC12) will be a different and singular event for the organization and also for the participating member countries. It is an extraordinary opportunity to take a fresh look to trade matters, in extremely difficult and rapidly changing times, and move forward with new ideas and proposals.

This Book attempts to provide analysis, ideas and proposals that may enrich the discussions and through them, contribute to the advancement of agreements and decisions that may consolidate the WTO as the main trade organization and agricultural trade in general.

The MC12 will take place in a particularly complex trade environment. It is for this same reason that it is absolutely crucial that it is a successful meeting and significant steps are taken to improve agricultural trade. Five substantive circumstances converge and create a unique institutional and economic environment in which the MC12 will take place:

First, as described in the Introduction to this book, the international context has undergone rapid changes in the economic, political and trade environments. Geopolitical configurations and alliances have changed quite dramatically and trade relations have been impacted by them. These reconfiguration processes are quite dynamic, and it is very difficult to predict how global geopolitics will look in the future, but it is likely that new long-term alliances will be formed between “think alike” countries and new and very competitive relations will develop between economically important countries that are competing for world leadership. Political considerations and alignments may influence trade agreements and trade flows.

Furthermore, food geopolitics has emerged as a main component of global geopolitics. Geographic imbalances between food production/exports and demand/imports have rapidly increased and have exacerbated the importance of food as a national strategic good.

In addition, these confrontational relations and other geopolitical changes have weakened global governance institutions in general and multilateral trade in particular along with the impact of the pandemic.

Second, and most important, the Covid-19 Pandemic will, most likely, be receding leaving behind weakened economies and aggravating the differences between developed and

emerging economies. The negative impact will be especially important in Latin America. Member countries will be in the process of internalizing and digesting the long-term consequences, especially in relation to social and economic conditions, faced by each one of them and for the region as a whole. Trade policies and potential trade negotiations will be an important consideration in the thinking process and a stronger interest in regional integration themes is a likely outcome.

Third, the global community of nations will have to jointly review and rethink the implications of this complex and rapidly changing global context in relation to global trade and international relations. Old, and always present themes, will have to be considered in the light of the new world situation and their relative importance and characteristics will have to be reassessed.

In this respect it is important to emphasize that a renewed global trading system is critical to supporting growth, technological advancement, and global stability. The MC12 will provide the opportunity to reactivate multilateral negotiations in order to achieve new and significant results, especially in agriculture.

Fourth, in addition to the global economic and geopolitical transformations described above the global economy is rapidly changing in response to the impact of trends such as the development of global value chains, the impact of digitalization and artificial intelligence and the emergence of new trade standards related to environmental, nutritional, and human health concerns. Because of these trends agricultural and food production will keep changing, and new conditions, requirements and issues will emerge in direct relation to agricultural trade.

The Conference will have the opportunity to look into these new issues within the context of the discussions and a new conceptual framework emerging from the United Nations Conference on Food Systems. Progressively, agricultural trade will be recognized as food trade. New social actors, new economic activities new trade standards and regulations and economic interests will have to be more fully incorporated in the negotiation process. The task is not easy, it requires the construction of highly complex consensus since they represent the interests, particularities, and sensitivities of all member countries in the organization. However, at this Ministerial Conference a general framework could be achieved to start a process and a program of work to incorporate substantive new issues.

Fifth, the WTO will have a new Director General that is committed to adopt organizational changes and new directions to adapt the organization and its role to the new global economic and political environment. In particular, the organization will have to face the reconstitution of the appellate body.

It is a moment in the history of the organization in which, countries must proactively participate in the debates about the reform in the multilateral trading system, and the reconfiguration of the general rules that will govern agricultural trade world-wide and in the region.

Agricultural trade negotiations

It is important to note that, despite the turbulent conditions the world has experienced since the last Ministerial Conference, activities in the WTO have remained substantial and meetings, dialogue and negotiations have taken place in the usual manner. It is also true that the results of these activities have been discouraging and little progress has been made in achieving results in the many subjects that have been, for many years, on the global trade agenda. This failure, and the incapacity for reconstituting the appellate body, has further introduced doubts in regards to the capacity of the organization to fulfill its important role. This is particularly relevant in creating the appropriate environment for trade negotiation and overseeing the compliance of member countries in relation to their commitments to follow trade rules and disciplines agreed within the organization.

The role of the WTO and the confidence of member countries in its capacity to fulfill its role need to be strengthened as soon as possible. One of the main lessons that come out from the Covid-19 experience is the evidence about the importance of global trade and the need for collective action to establish, not only a clear and feasible set of rules and disciplines to organize global trade, but also to facilitate and promote collaboration at the global level to respond to a whole set of new issues, such as climate change and human health, that emerge from the growing interdependence of all nations.

In the particular case of agriculture, considerable work has been advanced since the last conference in June 2021. The chairperson of the WTO Committee on Agriculture, Ambassador Gloria Abraham Peralta, has generated a report on the way forward for the next Ministerial conference (JOB/AG/215). The report mentions seven topics that have been actively discussed and some progress has been made: a) domestic support; b) market access (developing a comprehensive process and framework for market access reforms; changes in applied tariffs; TRQ administration; tariff simplification and transparency and clarification elements); c) export competition; d) export restrictions (the World Food Programme (WFP) exemption); e) cotton (cotton specific trade distorting domestic support); f) special safeguard mechanism and g) public stockholding for food security purposes.

The subjects discussed have been, for the most, in the negotiating table for many years. It is encouraging that the Committee is attempting to make progress in these important themes, but unfortunately, the discussions and communications suggest that the real achievements have been very small

On the other hand, as it is discussed in the papers included in this Book, during the last few years there are a number of new and different issues that have emerged and are beginning to influence the agricultural trade environment. The main new issues, that are especially relevant in relation to agriculture, and consequently need to be incorporated to the conversations, are of two types.

The first type is related to subjects that have been dealt in the margins of the negotiations but that are becoming new and promising avenues for agricultural trade negotiations. The main example of this type of issues is Plurilateral Agreements.

The second type of issues are related to the new environmental, nutritional and human health concerns and on how they will affect global food production and trade. These topics are being discussed in many quarters and have received a new attention as a consequence of the recently held United Nations Summit on Food Systems.

During the Pre-Summit, that took place in Rome in early August of 2021, the Ministers of Agriculture of the Western Hemisphere (Latin America, the Caribbean, USA and Canada) issued, within the institutional context provided by the Inter-American Institute for Cooperation on Agricultura (IICA), a joint statement in support of a declaration with 16 messages or recommendations. The main concerns expressed in the declaration are: a) reaffirmed the importance of an open and competitive agricultural trade and b) stressed that the new global standards related to the main five dimensions of food systems -efficient and sustainable production, environmental sustainability, health, nutrition and economic sustainability issues-, will have to be taken into consideration in a balanced approach and c) that trade restrictions that may be applied, should be based on scientific evidence and reasonable risk assumptions¹⁴³.

Looking forward: some ideas and suggestions that emerge from the empirical chapters in the book

Food demand is increasing quite rapidly specially in Asia while production and exporting capacities are increasing in a few regions of the world, mainly the western hemisphere. This geographic imbalance will result in a growing agricultural trade world-wide. Consequently, agricultural negotiations will have, for the foreseeable future, a permanent and increased importance and they should receive a high priority in the immediate future.

However, the agenda of these trade negotiations and the relative priority of the different themes need to be reexamined in the light of the new social, economic and political conditions that have emerged in the global context. We suggest that this examination should take into consideration the economic importance of each theme but also the urgency, especially for low-income countries, and even more so, the likelihood of achieving progress in the light of the new and evolving economic and geopolitical global environment. In other

143. Principales mensajes en camino a la Cumbre de las Naciones Unidas sobre los Sistemas Alimentarios desde la perspectiva de la agricultura de las Américas. Rev.1 IICA/CE/Doc.719(21) 28-29 de Junio 2021. A detailed treatment of the conceptual framework and background information are developed in Piñeiro, M; C Luiselli, Alvaro Ramos y Eduardo Trigo. El Sistema Alimentario Global: Una perspectiva dese América Latina. Editorial TESEO. Buenos Aires, September 2021.

words, the definition of the agenda should internalize the difficult and complex global situation and move opportunistically in those issues and themes where it is possible to achieve progress

With these considerations in mind, we would like to make some specific comments that emerge from the papers in this book describing some of the elements that need to be considered

Trade negotiations in the WTO have concentrated on a number of well-known issues. A number of these “old issues” that have been preeminent in the past, some of which have been described and analyzed in the first part of the book, are still important and need special attention in order to reach reasonable multilateral agreements. On the other hand, some of the most important issues, involved in market access and domestic support, which have been the main pillars in the global negotiation agenda, have lost center stage priority and, the possibilities of achieving progress in the multilateral environment on these two pillars is very difficult.

In the case of tariffs, it is important to note that the levels of tariff protection decreased, at the global level, quite substantially during the last two decades and were, in 2019, at a historically low. In addition, overall tariff protection has been perforated by the many bilateral and regional agreements signed by the mayor agricultural trading countries so their relevance as a trade impediment is much lower than in the past. In addition, since the last Ministerial Conference the conflicting trade relations between USA and China and the economic difficulties emerging as a consequence of the pandemic have led some countries to augment both tariff protection and domestic support measures. In the chapter written by Perini et al., it is emphasized the need to focus on solutions at a global level and the importance of strengthening the multilateral trading system to oppose future protectionist escalations.

Domestic support still is a major concern. A number of countries have increased them in recent times and it is likely that this tendency will be maintained in the coming years when most countries will be trying to reorganize their economies after the pandemic. Our impression is that, in this overall context, will be very difficult to advance serious discussions in a multilateral environment until the present economic difficulties, faced by most countries as a consequence of the pandemic, are resolved. However, it is important to note that Glauber, Laborde and Piñeiro analyses suggest that the impacts of the proposed disciplines for reducing trade distorting domestic support are quite modest. Showing that most countries would not have to make significant changes to the level of support given but with the benefit that it would harmonize support across WTO members and thus squeeze out much of the policy space that countries have today and as such it could help prevent or at least constrain future subsidy wars.

A very special type of domestic policies, which work against production and trade, are export taxes and restrictions. Although they have been applied by a limited number of countries they

need to be considered and clear disciplines need to be defined. In his paper Illescas and Jorge argue that export taxes are the least damaging export control measure compared to other forms of control and are an easy way to generate government revenues. However, export taxes have a negative and lasting impact on the level of production, the application of innovations that contribute to a more sustainable agriculture and the stable and reliable supply of food to the international market. Because these negative effects export taxes and any other export restriction measure should be in the table of negotiations in order to define clear disciplines.

If these very substantial and historically important themes related to the two main pillars are put on hold for a time, political and negotiating energy will be available to progress in other issues that are also important, probably even more urgent for developing countries, and have in the present conditions higher possibilities to reach some type of consensus to move forward.

Following the discussion presented earlier on in this chapter and the results presented in the empirical chapters there are some themes that seem to have a special potential in agricultural negotiations and could receive high priority in the future agenda. There are two types of themes

The first type refers to subjects that have been under consideration for some time and some progress has been made, but no integral and satisfactory solution has been found. In regards to this first type of issues the following two seem to be especially interesting to include in the immediate agenda:

- a) **Public stockholding.** The chapter written by Díaz-Bonilla in this book describes the history of negotiations and the different issues that are involved and suggests some possible avenues of negotiation. The theme was also treated in the previous book edited in 2017 in which concrete suggestions were made. These and other papers that are available in the literature are a good basis for the generation of a new proposal.
- b) **Plurilateral agreements.** Following the definition proposed by Boüet and Laborde in their chapter plurilateral trade agreements are defined as those that include a subset of countries that negotiate trade conditions in respect to a subset of goods. This subject is discussed in this Book and was also dealt in the previous one. It appears as a possible avenue to progress in many cases in which there are common interests by a limited group of countries that can arrive to consensus that would be impossible in the context of a multilateral agreement. One main example is the possibility that a group of countries that are main net food exporters agree, with a group of countries that are net food importers, certain conditions to stabilize prices and make food trade between them more secure and stable.

The second type of issues refer to new subjects that have not been formally introduced in the agenda of the agricultural committee. They are themes that will substantially change

the nature of negotiations and will become new themes within the main two pillars of market access and domestic support.

The first theme to be considered is the way that policies and support schemes designed to protect the environment will add a layer of complexity to the domestic support pillar. One main complexity is that the classification of the programs into each of the boxes defined under the WTO and hence the countries' available policy space becomes blurred. Attention has to be paid to support measures, especially price incentives and coupled subsidies that can distort producer planting decisions, the type and use of production inputs, and trade and marketing strategies. Glauber, Laborde and Piñeiro in their chapter on the impacts of agricultural producer support on climate and nutrition outcomes highlight the effect of removal of fiscal policies and border measures on the environment, nutrition and food security.

The second theme is the likely implementation of new standards designed to protect the importing country from environmental, nutritional or human health concerns as well as to avoid carbon leakage. Examples of this would be the Carbon Border Adjustment Mechanisms (CBAM), suggested in the EU Farm to Fork, and the implementation of obligatory labelling of processed foods in the case of nutritional concerns. These new standards would become barriers to trade that need to be internalized in the market access negotiations.


Papendieck and Elverdin highlight the idea that the aim is not only to ensure that environment and trade instruments are mutually supportive, but to promote the use of trade as a vehicle to deliver on the environmental and resilience agenda.

A more focused agenda on these new subjects that could become real barriers to trade will provide a new dynamism and add complexities to agricultural negotiations. However, we suggest that a new and reinvigorated WTO cannot avoid taking on board these new issues and perspectives.

Furthermore, the current paralysis of the WTO appellate body, as well as the existing bilateral frictions between major countries have affected the institutions' effectiveness to regulate and arbitrate conflicts in food trade relations as mentioned in the chapter written by Bianchi. It is also clear, the need to have a constructive discussion about the future of the WTO dispute settlement mechanism in order to fulfil its role. Gonzalez and Glauber also point out to the importance of this mechanism for LAC's agricultural export growth and its positioning in global trade.

Progressing in the subjects we have delineated require, as pointed out by Campos and Garcia, to assure an adequate level of provision of information on a voluntary basis, transparency, and timely notifications.

Trade in agricultural products is an important factor in terms of improving the global food system. Trade policies should accompany the countries' objective of a sustainable



diet -affordability and accessibility- by working within existing trade rules to create better outcomes for nutrition, while not forgetting the relationship between trade and the environment. Achieving concrete benefits imposes new and urgent demands for effective cooperation among countries with inclusion of the private sector. There is an urgent need to fulfil the WTO's role as a steward of global trade in all its dimensions.

Looking forward to the upcoming WTO Ministerial Conference with the objective of moving forward in the themes under discussion, we must think about making the system more transparent. This is a low hanging fruit that should not be difficult to achieve.

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