



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*



This IATRC Policy Brief summarizes outcomes of the Annual Meeting Theme Day, held December 14, 2020, via virtual platform.

Drs. Andrew Muhammad and Jason Grant served as Theme Day organizers.

Dr. Muhammad is Professor and Blasingame Chair of Excellence in Agricultural Policy in the Tennessee Institute of Agriculture, Department of Agricultural and Resource Economics, at the University of Tennessee. amuhamm4@umn.edu

Dr. Grant is an Associate Professor in the Department of Agricultural and Applied Economics at Virginia Polytechnic Institute and State University. jhgrant@vt.edu

IATRC Policy Brief
PB #2021-10

Economic Implications of COVID-19

Introduction

The International Agricultural Trade Research Consortium (IATRC) is an international association of agricultural researchers and policy practitioners. The objective of the Consortium is to enhance the quality of agricultural trade research by encouraging collaboration among international researchers to improve public understanding of international trade and trade policy issues through various activities such as its flagship annual conference, organized symposia, and outreach activities.

Each year, the Consortium holds its annual meeting where members including academics, government representatives and business researchers discuss research priorities and plans as well as report on on-going research. The first day of this meeting is called Theme Day, which is devoted to a topic such as a policy issue, an area of research, or a research methodology. The focus is on innovative trade analysis and research with potential applications for agriculture. The Theme Day also helps to facilitate the exchange of ideas and foster collaboration.

This year, the Theme Day discussions focused on the latest research and analysis regarding the economic implications of COVID-19, with five sessions as summarized below. Due to travel restrictions related to the COVID-19 pandemic, the 2020 Annual Meeting was conducted on a virtual platform.

The presentations noted that the pandemic has caused disruptions in production, transportation, food inspections, and supply chains. We have also seen a big increase in the demand for food staples and a collapse in food sales from restaurants. Government interventions have included the declaration that agriculture is an essential service, and government programs were initiated to alleviate labour shortages, address food insecurity, streamline regulatory procedures, and temporary trade policy measures were put in place to speed up trade negotiations to address food security issues. The financial cost to governments has been high, and some countries are running huge government deficits, while private investment is declining.

It was also noted that border restrictions to control the spread of the COVID-19 pandemic have led to lower cross-border flows of goods. Going forward, evidence-based policy responses are vital to build back national economies better in the post-pandemic work.

The Annual Meeting program and presentations are available at:
<https://iatrc.org/2020-iatrc-annual-meeting>

The 2020 Theme Day featured the following speakers:

Marion Jensen
OECD

Simon Evenett
University of St. Gallen

Tomasz Brodzinski
IHS Markit and the University of Gdansk

Pol Antràs
Harvard University

Pablo Fajgelbaum
Princeton University

Session 1: COVID-19 and the Global Economy

Marion Jensen (Organization for Economic Cooperation and Development (OECD))

Global merchandise and services trade, value chains and FDI flows impacted by the pandemic

Since the 2009 global financial crisis, international merchandise trade has been growing at a slower pace but it has not fully recovered to pre-2009 levels. The Tsunami in Japan and trade war between the U.S. and China could be two of the underlying factors affecting this trend. The slower pace in merchandise trade has also negatively affected global value chains and foreign direct investment (FDI) flows worldwide. Given this situation, the COVID-19 pandemic is another hard blow to international merchandise trade, value chain growth and FDI flows due to numerous measures taken by governments to prevent the virus spread, such as restrictions on non-essential cross-border trade, and people mobility.

Moving into the future

During the pandemic, agriculture and agri-food trade has shown remarkable resilience compared to merchandise trade and it has kept food prices stable. Most importantly, the Agriculture Marketing Information System (AMIS), an inter-agency platform to enhance food market transparency and policy response for food security, has played a key role in avoiding a food crisis amidst the pandemic. A stable and regularly updated AMIS is definitely a vital step to meet future challenges, and to avoid restrictive trade policies in agricultural markets in times of crises.

The recent G20 Trade Ministers and G20-Leaders virtual summits have focused on international collaboration to recover from the COVID-19 pandemic by introducing transparent policy measures for goods and services trade, supporting a modern global tax system, and helping the developing countries with emergency funds and extended periods of debt repayment. Looking ahead, short, medium, and long term policy initiatives could play an important role in recovering from the impacts of the pandemic.

Short term measures

The OECD recommends international cooperation around COVID-19 vaccine production and distribution, and introducing coordinated regulatory flexibilities to facilitate cross-border merchandise trade and people movement in order to recover from immediate impacts of the pandemic on global economies.

Medium term measures

The OECD recommended that medium term policy measures include building resilience of supply chains for essential goods and services with collaborative efforts with the private sector both unilaterally (i.e. introduce digital border processes and diversified supply chains) and internationally (i.e. avoid trade restrictions, support a stable and updated market information system, and promote internationally accepted regulatory procedures for cross border people mobility and services trade) to rebuild the global economies impacted by the COVID-19 pandemic.

Long run measures

The OECD emphasizes governments' support to re-stabilize global policy landscape and strengthen multilateralism in the post-pandemic world. These government efforts should include showing active support for globalization through improved international goods and services trade; providing support to the private sector with favourable policies on business finances and taxation to improve global value chains and FDI flows; and addressing climate change to rebuild the future sustainably.

Session 2: COVID-19 and Trade Policy

Simon Evenett (Global Trade Alert, University of St. Gallen)

Simon Evenett founded Global Trade Alert (GTA) in 2009 at the time of the global financial crisis. The GTA focuses on policy choices of G20 governments, since their leaders made a “no protectionism” pledge in 2008. Although initially conceived as a trade policy monitoring initiative, the GTA has become widely used as an input into analysis and decision-making by governments, industry, and international organizations.

High profile trade policy developments in “essential goods”

Across all sectors of the economy, there were 109 export controls in place by the end of 2020, and about a third of 2020 export controls are expected to stay in place beyond 2020. Export controls in agriculture were relatively limited but they received a lot of media coverage; they took differently forms, and sometimes governments purchased all that was available domestically. Import reforms to lower the cost of food were more common.

Global developments

Over 2,000 policy interventions affecting global commerce across all sectors were recorded in 2020 by GTA. Not all pandemic responses had consequences for trading partners; however, of those that did, three-quarters were harmful. One-quarter of all policy interventions were to liberalize trade. There were more subsidies in 2020, but there were also some tariff cuts in this year. In terms of policy intervention spillovers, negative spillovers were 17% higher than positive ones. Russia removed 20% of its new trade distortions by the tenth month of 2020. For Canada, many subsidies were put in place with no end date Canada was one of the worst countries in terms of implementing policies with no date with over 90% of new measures being recorded without an explicit phase-out date. Regarding agriculture, there was a lot of variation in policy interventions across countries; 64% of agriculture trade was impacted by interventions in 2020.

Policy implications for the WTO rule book

There are clear gaps in the World Trade Organization rule book relating to the use of export restrictions. Regarding subsidy rules, we need to ask whether an entire new approach to WTO rules needs to be considered during a crisis. Should WTO rules become tighter during crises or shocks (embedded liberalism approach) to prevent any disingenuous use of crises periods to justify protectionist policies? The World Health Organization has rules that come into effect during crises, and therefore why should the WTO not have such rules.

For further information on Global Trade Alert findings, see the recent report:

This Collateral Damage: Cross-Border Fallout from Pandemic Policy Overdrive
<https://www.globaltradealert.org/reports/60>

Session 3: Impact of the COVID-19 Pandemic on Global Trade

Tomasz Brodzinski (Information Handling Service [IHS] Markit and the University of Gdansk)

Impact of pandemic on global trade

The impact depends on the duration, severity and spatial pattern of the pandemic. Countries most adversely affected by COVID-19 will be those struck the most by the pandemic itself as well as countries most dependent on trade with these nations

through exports/imports linkages. The severity of containment efforts taken by individual countries are key, not only to the countries themselves, but their trade partners as well. If certain measures adopted by states are extended, we are likely to observe more pronounced adjustments to global value chains and trade patterns (trade diversion effects). Increased defragmentation of production chains increases the susceptibility of the global economy to the shock.

Results of empirical analysis

The impact of COVID-19 on bilateral trade is statistically significant and adverse, *ceteris paribus*, on both the exporter's and importer's side. The results hold for both monthly-reported new COVID-19 cases as well as new COVID-19 related deaths as a proxy for the severity of the pandemic. The models re-estimated on a monthly basis show that the impact becomes adverse and statistically significant globally in March 2020 and the effect endures. This coincides with the escalation of COVID-19 from Asia to Western Europe.

The stringency of government responses to the pandemic, as measured by Oxford University's COVID-19 Government Response Tracker index, has a statistically significant and negative impact on the importer side only in a global sample model, which could be indicative of the creation of significant hindrances to trade and weaker consumer demand. The impact of COVID-19 is most visible in the group of advanced exporters followed by emerging states.

Global merchandise trade is likely to go down in 2020 to USD 16,382 billion or -13.5% year-on-year. A year-on-year increase in the real value of global trade by 7.6% in 2021 and 5.2% in 2022 is forecasted. The forecasted compound annual growth rate (CAGR) for the period 2021-2030 is 3.5%. Global trade volume in 2020 is expected to go down to 12.7 billion metric tons and to increase to 13.6 billion metric tons in 2021. A decrease of about 11.2% in the global volume of trade in 2020 is expected and a recovery in the forthcoming years is expected with growth rates of 7.5% year-on-year in 2021 and 4.1% in 2022. The forecasted CAGR for global trade volume is 3.2% for the period 2021-30. The adverse impact of COVID-19 on global trade volume is larger than the impact of the global financial crisis of 2008-09 at least in the short run. However, there was some discussion over whether this is actually the case and what time period is used in the comparison.

Session 4: Globalization more prone to Pandemics?

Pol Antràs (Harvard University)

SIR model for spread of diseases

The author presented a conceptual approach to building an econometric model to estimate the complex relationship between globalization and the incidents of pandemics. The SIR model for the spread of diseases was used—SIR stands for the number of *susceptible* people, *infected* people, and *recovered* people. Different scenarios were highlighted to reflect the global economy during a pandemic, including open and closed market conditions and whether people are aware or unaware of the consequences of the pandemic. A number of real world economic activities are represented in this model, including changes in labour markets, people mobility, wages and trade. In terms of policy perspectives, this model can suggest efficient ways to organize confinement measures to combat future pandemics in a highly globalized world.

Session 5: Optimal Lockdown in a Commuting Network

Pablo Fajgelbaum (Princeton University)

Main consequence of COVID-19 is reduction in movement of people

The New York, New Jersey, and Connecticut areas were examined as a case study of lockdowns in a commuting network. A quantitative trade model and the Standard SIR model with a spatial dimension was used (where SIR stands for *susceptible* people, *infected* people, and *recovered* people). People spend time where they live, but they have to travel to a work location where they can come in contact with those infected with COVID-19. The model compares the reduction in the number of people commuting with the optimal level of commuting, where businesses and public spaces are closed for a long period of time. Income flow is associated with the flow of commuters. The bulk of income loss from residents in the cities studied is from loss of commuting. The decline in movement of people is associated with lower expenditures. However, the targeting of lockdowns can cause less income loss to a city's residents. Savings from shopping online, rather than commuting to shop outside of the home, is not covered in the model.

Conclusions

The COVID-19 pandemic has impacted the agriculture and food sector through disruptions to production, transportation and supply chains, and labour storages. There has been a large increase in demand for food staples and a collapse in food sales from restaurants. Government interventions in the agriculture and food sector have been important for continued movement of goods, including the declaration that the agriculture and food sector provides essential services. Food insecurity problems in developed countries are being addressed; however, food insecurity has increased in developing countries.

Economic disruptions caused by the COVID-19 pandemic have resulted in an unprecedented collapse of international trade in 2020. Yet, trade also plays a key role in fostering economic recovery in the post-pandemic. It has been clear that open borders and international trade have been important for the resilience in the goods and services supply chain, by diversifying the origin and destination of products. As countries are lifting emergency trade measures and introducing recovery plans, they need to assess the multifaceted impacts of trade policies, utilizing them to achieve stronger and more resilient recovery. In this context, agricultural trade policy can play a vital role in supporting a sustainable economic recovery by way of safeguarding the global food supplies.

The COVID-19 pandemic has revealed the vulnerabilities in the global food system with significant impacts on all agriculture and food markets. Importantly, the post-pandemic recovery will provide an opportunity to build back better and to promote integrated actions across the food system beyond borders. As indicated by the empirical analysis presented at this Theme Day, linking health and economic modelling tools could help reduce the adverse economic impacts of pandemics and similar crises.

Research and analysis are important to governments as they navigate the crisis in the medium term and face numerous questions, such as the following:

- How can countries improve the resilience of food supply chains, while remaining competitive in global agriculture and food markets?

- Can international trade coupled with preferential trade agreements and the diversity in food supply chains be key elements to address food and nutrition insecurity among populations?
- How could governments react to challenges stemming from increasing levels of subsidies and other trade-distorting measures that may support domestic food autonomy/shorter food supply chains?
- How could agriculture and food suppliers better position themselves to be part of the post-pandemic global agricultural trade landscape, with shifts in consumer demands, accelerated digitization in the global trade network and the risks of protectionism?
- How will a renewed focus on environmental sustainability and climate change mitigation impact the competitiveness of countries in global agriculture and food markets?