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## **Deglobalization: Can We Gain Insights from Agricultural Sector?**

**Anupa Sharma**

*Selected presentation for the International Agricultural Trade Research Consortium's (IATRC's) 2020 Annual Meeting: Economic Implications of COVID-19, December 14-15, 2020, Virtual platform.*

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**Research Plan Prepared for the Non-Theme Day  
Presentation, IATRC 2020**

Deglobalization: Can we gain Insights from  
Agricultural Sector?

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# Outline

Introduction

Motivation

Approach

Hypothesis

Stylized Facts

Preliminary Results

Summary

## Two Broad Questions Related to Globalization

- ▶ Globalization: Freer flux of goods, services, and labor across international borders.
  - ▶ Is deglobalization even an option in the agricultural sector?
  - ▶ If so, under the regime, what would the optimal liberalization framework look like?

## Two Major Motivations

- ▶ General concern about the returns to protectionism, Euroskepticism, and Brexit
- ▶ Constructing A New Global Order: A Project Framing Document (Dani Rodrik and Stephen Walt, 2020)

## Two Extremes: "Beggar-thy-Neighbor" and "Beggar-thy-Home"

- ▶ Countries may want to pursue economic policies to stimulate export-driven growth at the expense of trading partners
- ▶ Obviously the opposite end where the domestic firms loose is not desirable, either

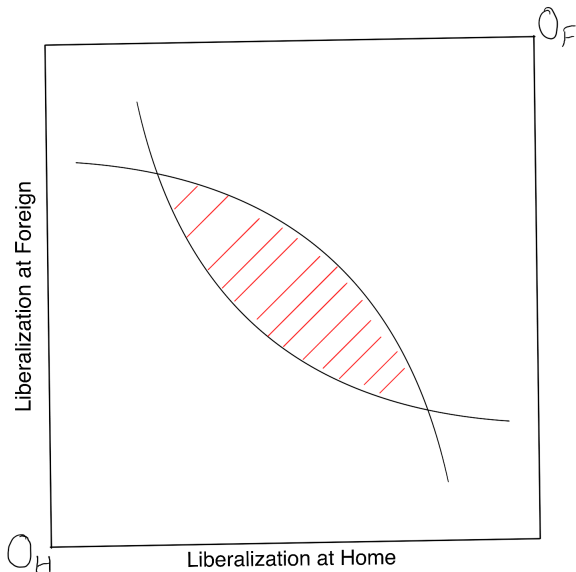
## Preliminary Hypothesis

- ▶ The two extreme policy scenarios may not lead to functional liberalization framework or bilateral trade
- ▶ There might exist a region delineated by these extreme events which could lead to optimal level of liberalization



# Deglobalization: Can we gain Insights from Agricultural Sector?

└ Figure 1: The region



## WTO Disputes and Bilateral Trade

- ▶ What is the connection between trade liberalization and the WTO disputes?
- ▶ Can they measure trade liberalization?

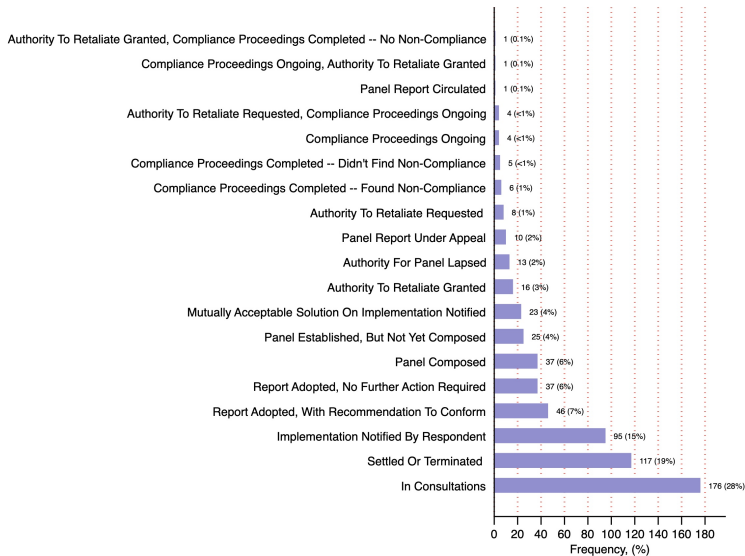
## Creating Database: Linking and Cross-referencing WTO Disputes which are Available as Separate HTML Tables

- ▶ Data Source: WTO Dispute Settlement (WTO website)
- ▶ Files Linked:
  - ▶ Chronological list of disputes
  - ▶ Disputes by Short title
- ▶ Cross-referenced using:
  - ▶ Disputes by Member
  - ▶ One page summary of the dispute to date which are prepared by WTO Secretariat

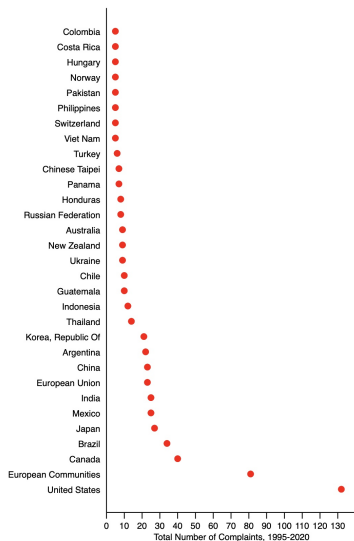
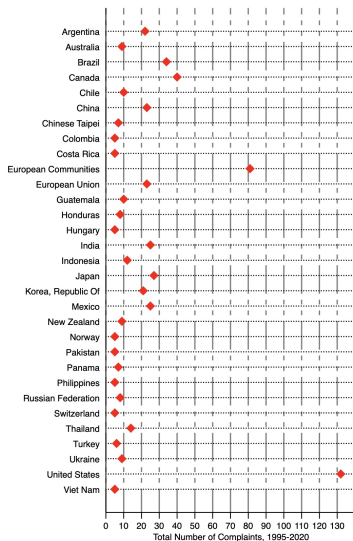
## Agriculture Constitutes an Important Sector

<b>Variables</b>	<b>Observations</b>
Total Conflicts	638
Agriculture	205
AoA	84
SPS Measures	49
TBT Measures	56
Anti-Dumping	134
Intellectual Property Rights	42
Rules Of Origin	8
Complainants	52
Respondents	61
Bilateral Cases	240

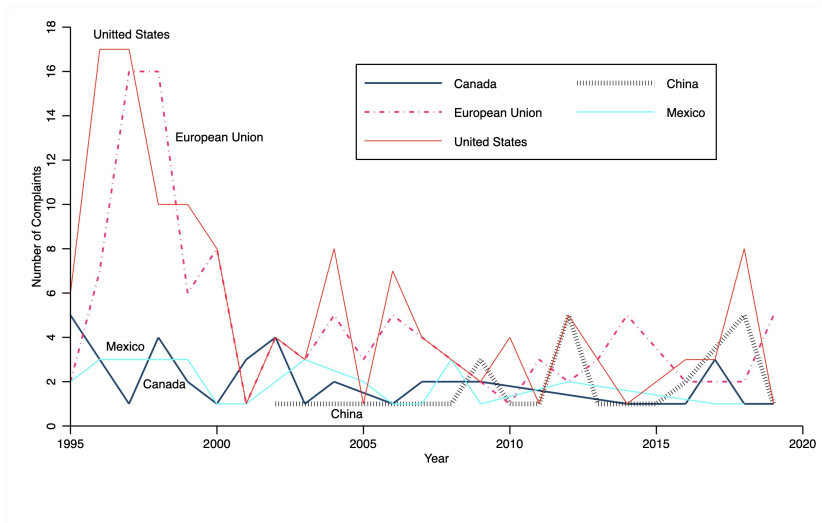
## WTO Disputes by Stage



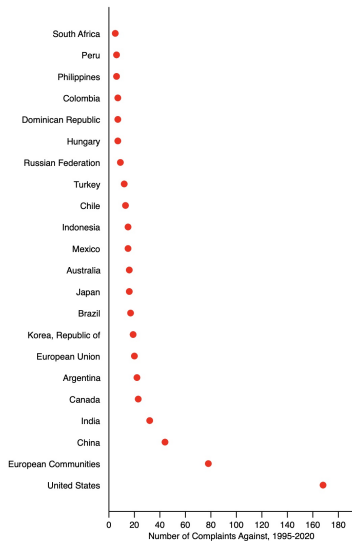
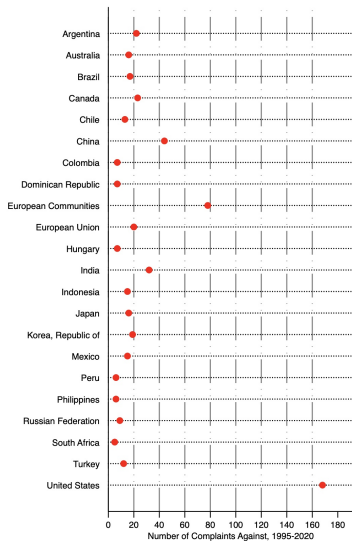
# Who Files Most Complaints in WTO?



# Complaints Filed Over Time Since the Establishment of the WTO

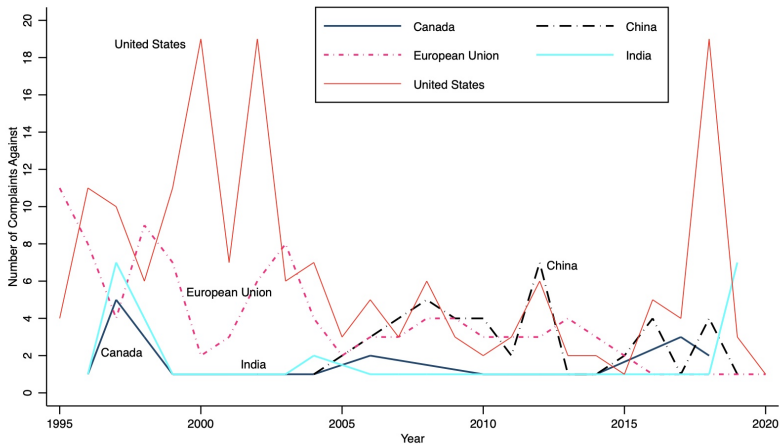


## Who Received Most Complaints?

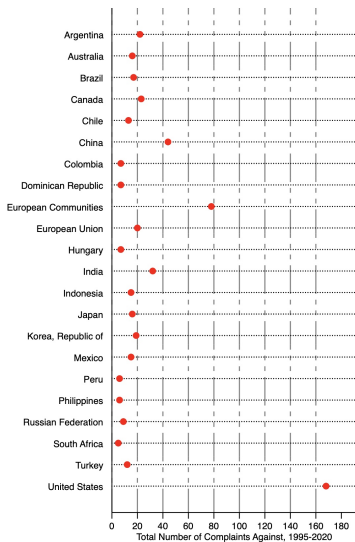
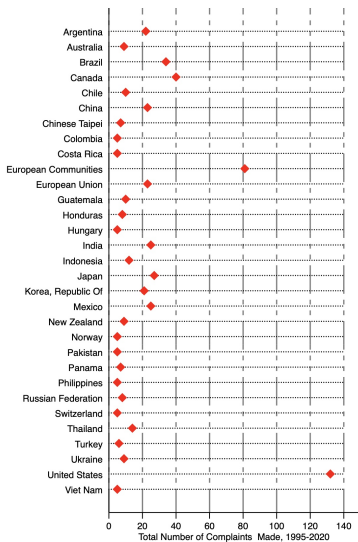




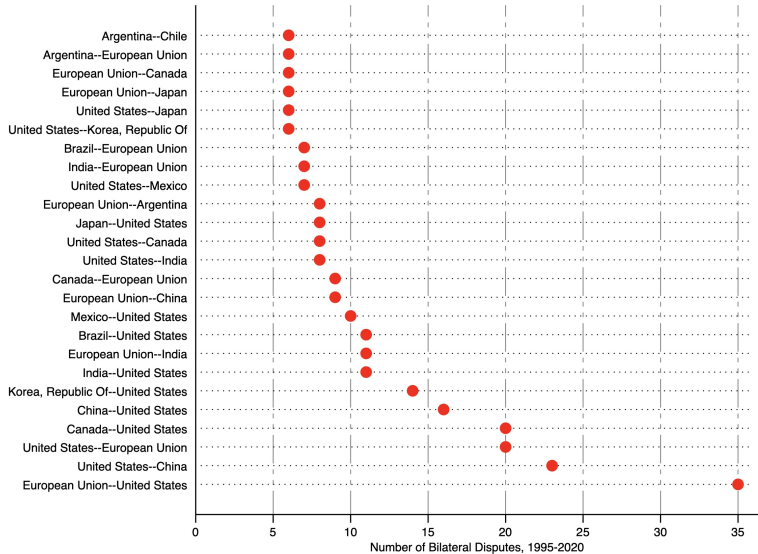
## Complaints Received Over Years



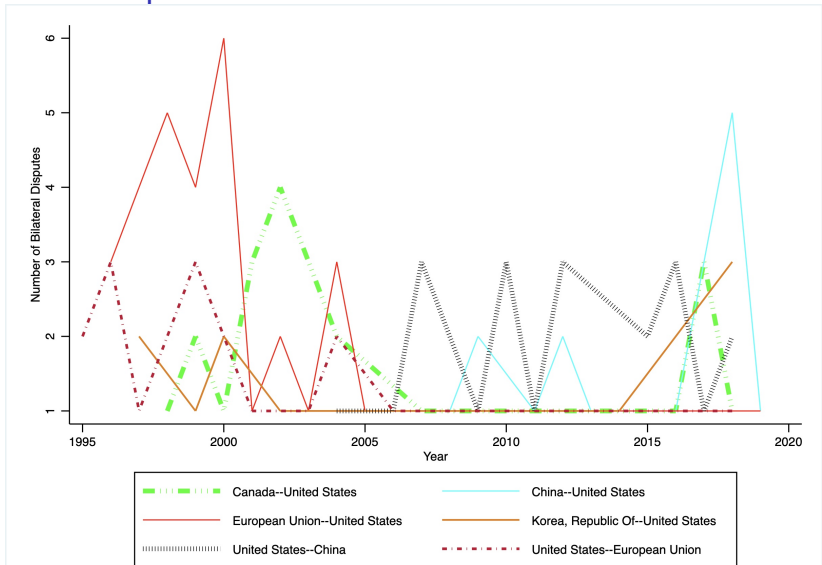
## Do Countries Return the Favor? Tit-for Tat?



## Bilateral Disputes Since the Establishment of the WTO



## Bilateral Disputes Over Time



## Summarizing the Stylized Facts

- ▶ WTO disputes are distributed as extreme value events
- ▶ WTO disputes have declined over time with some notable exception
- ▶ Indeed United States, European Union and China feature prominently either as complainant or as respondent or as both
- ▶ Strong dependence on unobserved variable as sorting shows distinct convex pattern
- ▶ Tit for tat?

# Preliminary Estimates

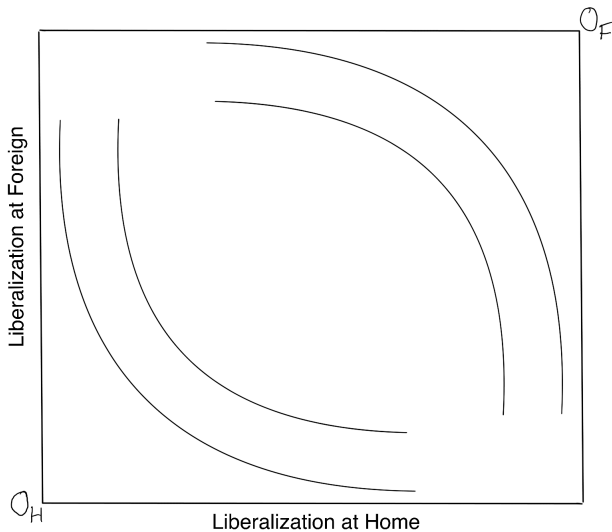
Table: Trade Effect of Disputes

Var	(1)	(2)	(3)
$Dispute_t$	-0.13 (.10)	-0.11 (0.10)	-0.09 (0.09)
$Dispute_{Ag}$	-.28** (.14)	-.28*** (.11)	-0.23* (0.13)
$Dispute_{t-1}$		-.08 (0.09)	-0.003 (.11)
$Dispute_{t-1}^{Ag}$			-0.27** (0.14)

Notes: Dep var is Aggregate Exports. Disputes are bilateral.

# Deglobalization: Can we gain Insights from Agricultural Sector?

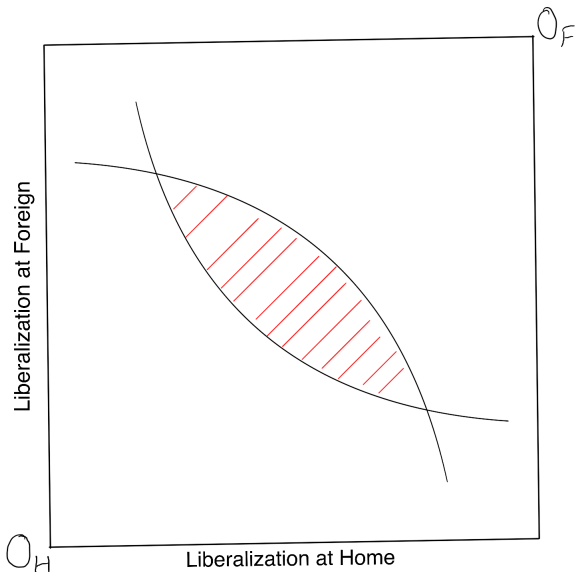
## └ Liberalization Framework: Home and Foreign Perspective





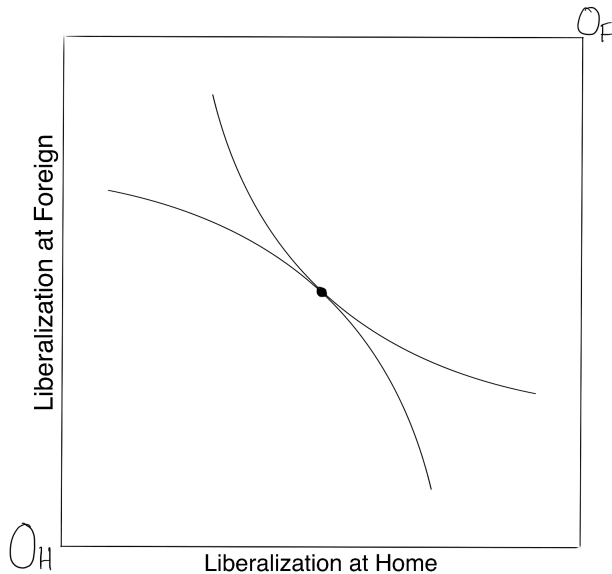
## Deglobalization: Can we gain Insights from Agricultural Sector?

↳ Liberalization Framework: Region Delineated Between Extreme Policy Scenarios



Deglobalization: Can we gain Insights from Agricultural Sector?

↳ Liberalization Framework: Is It Possible to Pin-Point an Equilibrium?





- ▶ Let the wage rate at Home and Foreign be  $w^H$  &  $w^F$
- ▶ People are attracted to Home only if  $w^H > w^F$
- ▶ International migration is costly, say is distributed as  $g(m^H)$  with support  $(0, \infty)$
- ▶ Upon international migration, employment is possible only when adjustment cost  $\nu(L_S)$  is incurred
- ▶ This ensures that the mass of international migrants is bounded even in absence of additional policy

$$E(w^H(L_s)) = w^F(L_s) + C^H + \nu(L_s^F)$$

- ▶ At new equil, total labor supply at Home,  $L_e^H = L^H + P_x * I^F$  when there is perfect match of skills in the current employed pool at the sector level
- ▶ If there is mismatch,  $L_e^H = L^H + P_x * I^F * \phi(I_s^F)$
- ▶ When there is mismatch, spending on human resource is less effective.

## Incomplete Pass through of Variable Cost

$$P_{ijt} = \gamma_{it} + \gamma_{ij} + \gamma_{jt} + \beta * Cost_{ijt} + \epsilon_{ijt} \quad (1)$$

If costs were to increase, how much does that translate into price changes, *ceteris paribus*.

## Summary and Preliminary Conclusions

- ▶ There is a tight connection between WTO disputes and bilateral Trade.
- ▶ Potentially, labor market determinants – mismatch in labor market, and wage rate should be included in the framework.