

# National Economic Education Delegation

- **Vision**

- One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.

- **Mission**

- NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States.

- **NEED Presentations**

- Are **nonpartisan** and intended to reflect the consensus of the economics profession.



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# Trade Effects of the Pandemic

**Alan V. Deardorff**  
**University of Michigan**

*For presentation to Fellowship Forum  
October 6, 2020*



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## Effects of the Pandemic

- **Effects of the Pandemic**
  - On Economies, Including on Trade
  - On Trade Policies

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## Effects on Economies

- **Effects of the Pandemic on Economies**
  - Trade plummets
  - Travel halted
  - Stock markets fall
  - Factories shut down
  - Shipping
  - Supply chains interrupted
  - Unemployment
  - Reduced GDP
  - Panic buying and shortages

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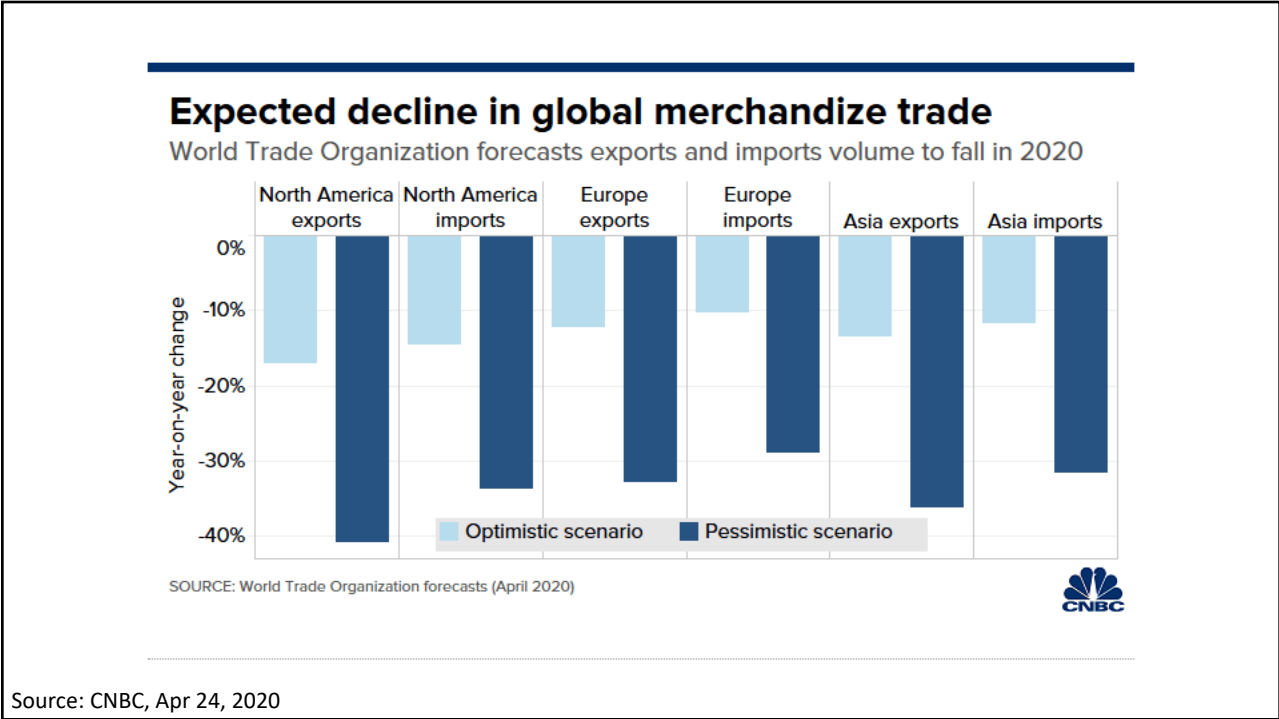
# Trade



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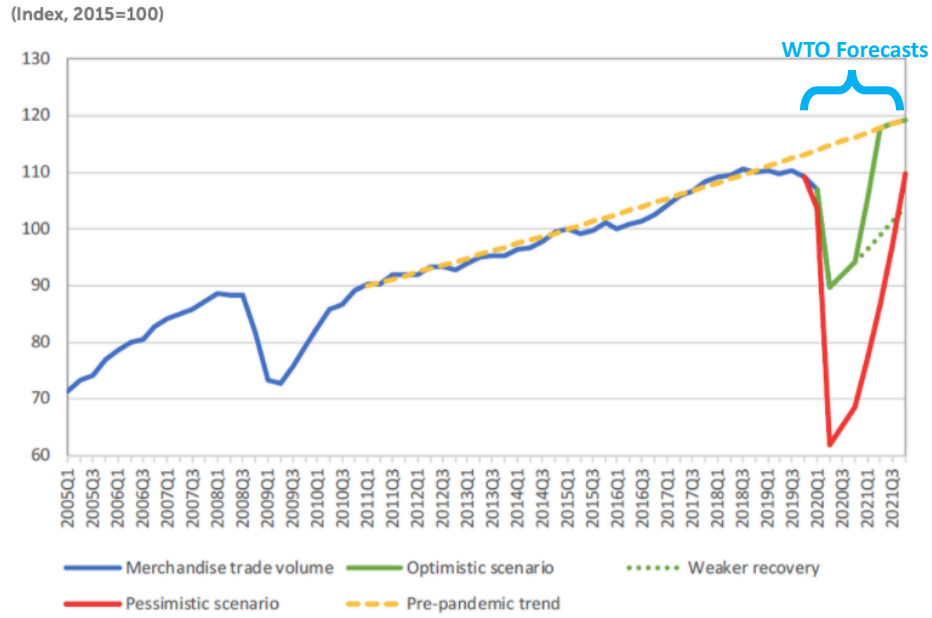
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Source: CNBC, Apr 24, 2020

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**Chart 1: World merchandise trade volume, 2005Q1–2021Q4**



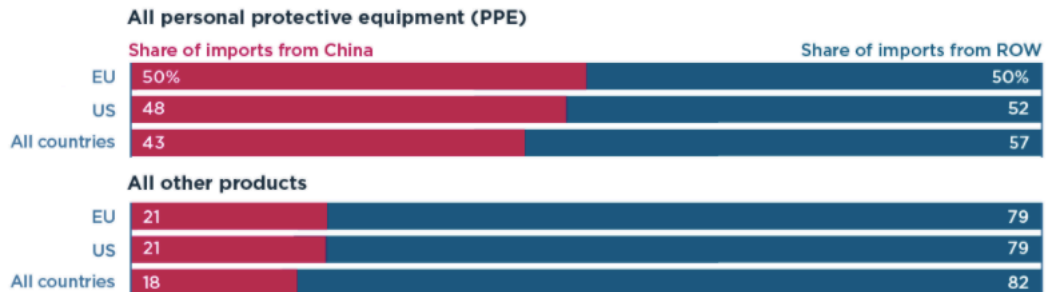
Source: WTO  
Jun 22, 2020

Source: WTO/UNCTAD and WTO Secretariat estimates.

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**Much of the world's imports of personal protective equipment come from China**

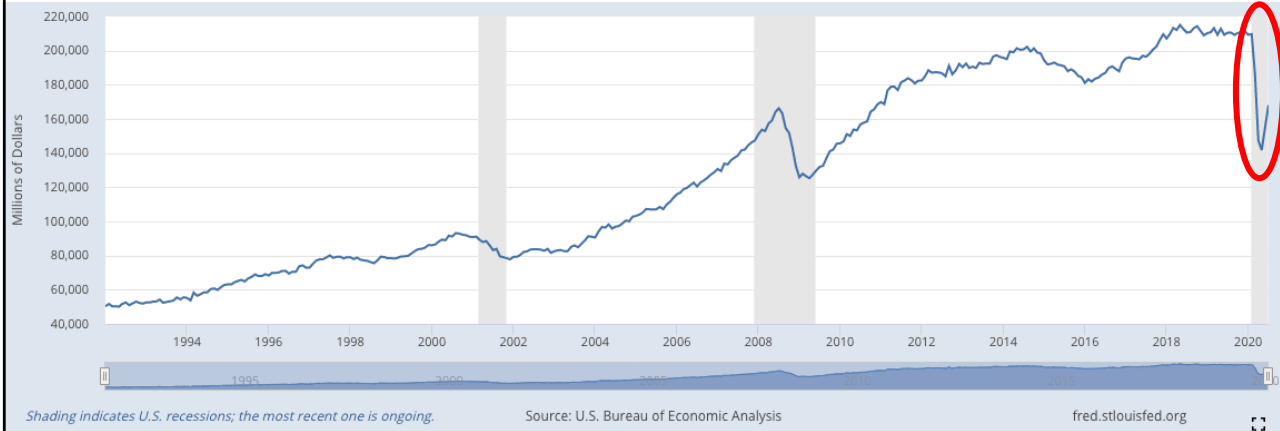
Imports by product and source, 2018



Source: Bown (2020)

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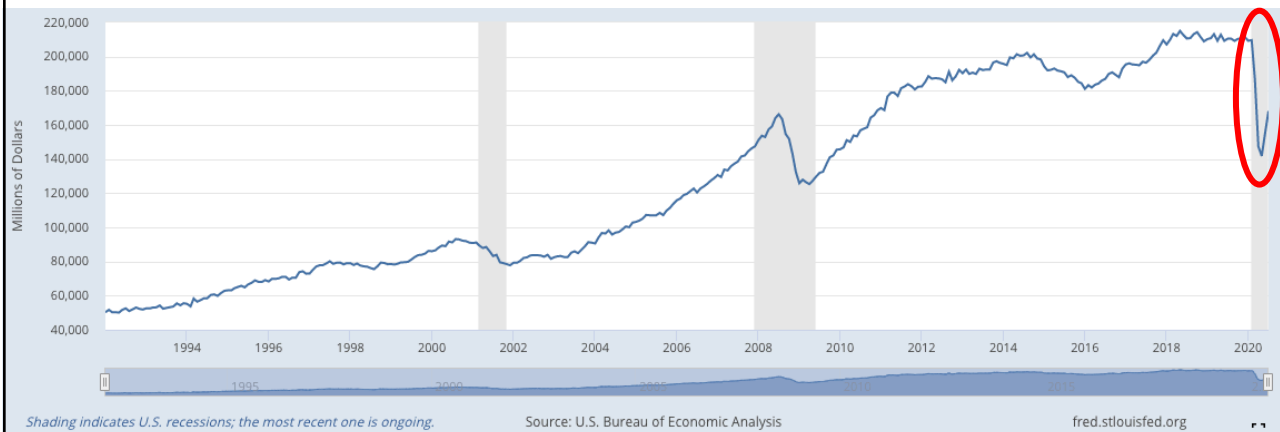
### US Exports of Goods and Services, Balance of Payments Basis



Source: FRED Sep 15, 2020

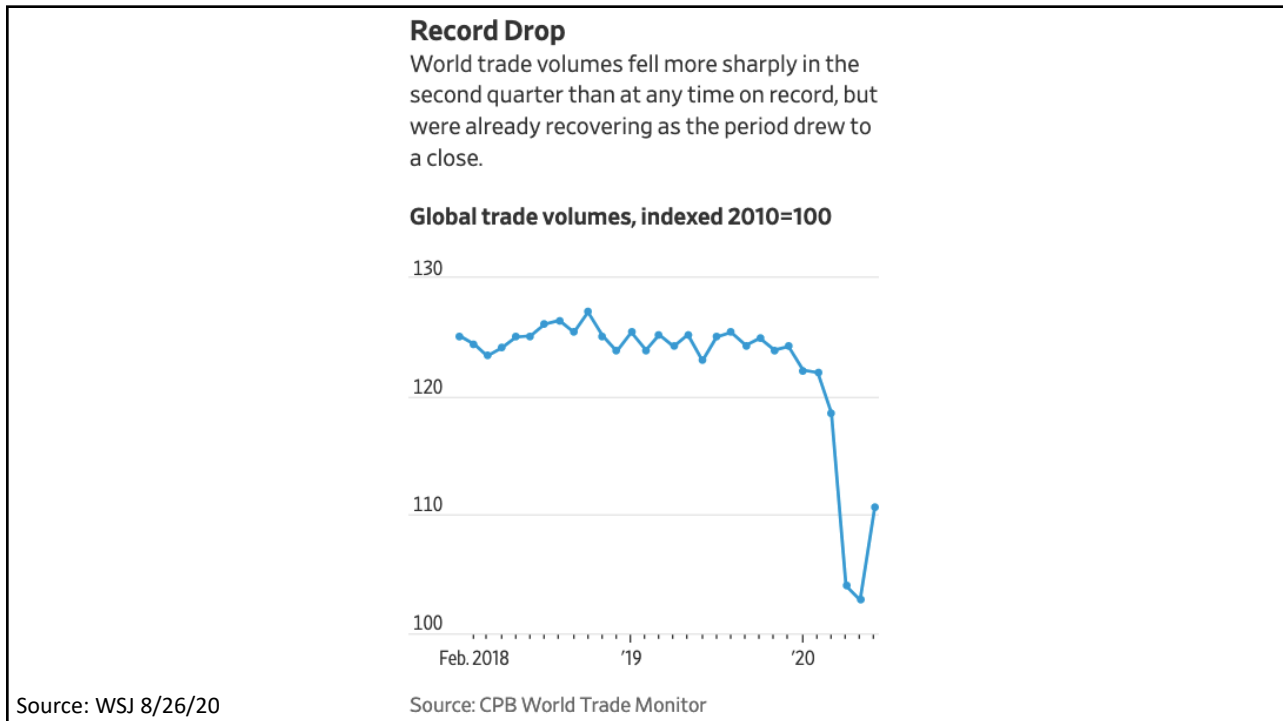
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### US Imports of Goods and Services, Balance of Payments Basis



Source: FRED Sep 15, 2020

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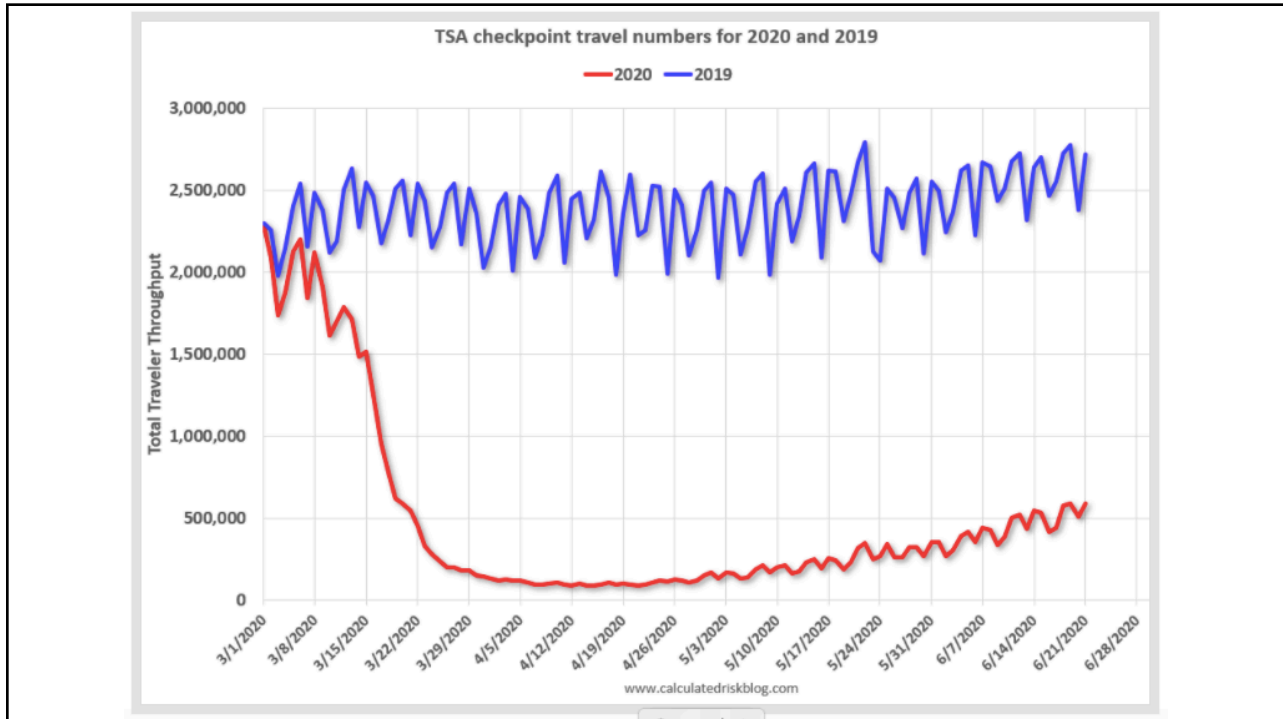
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# Travel

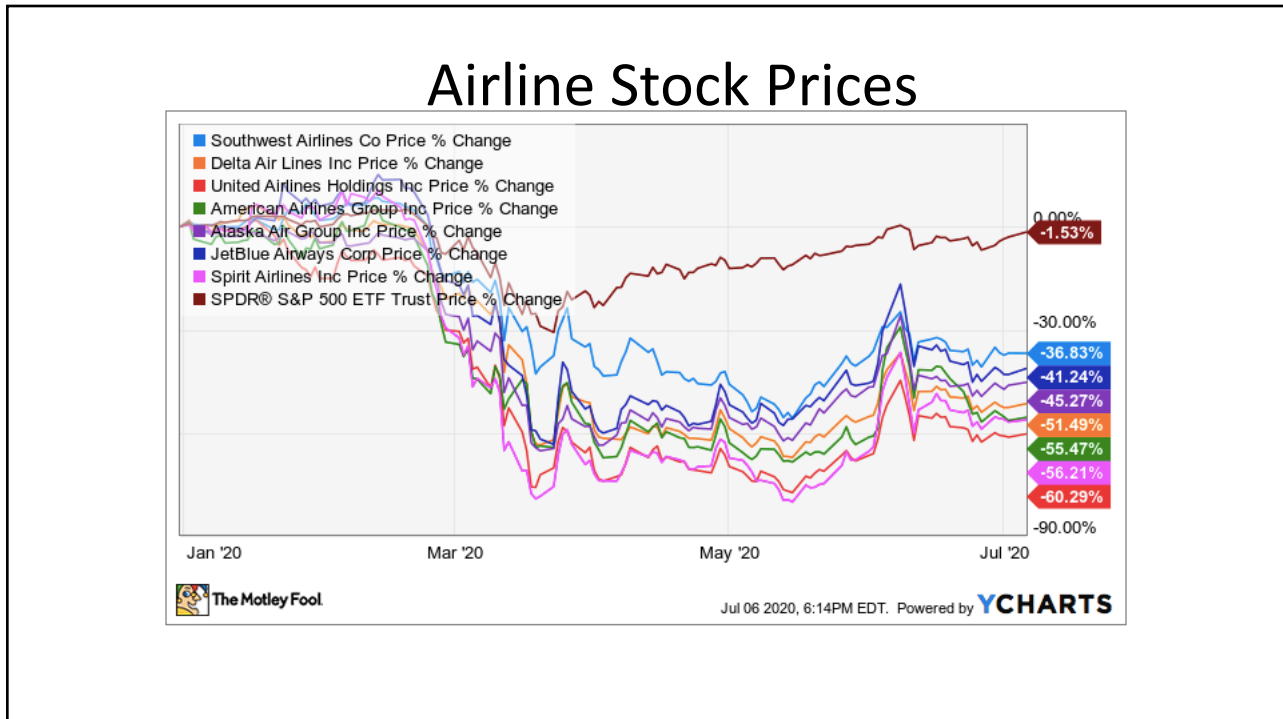
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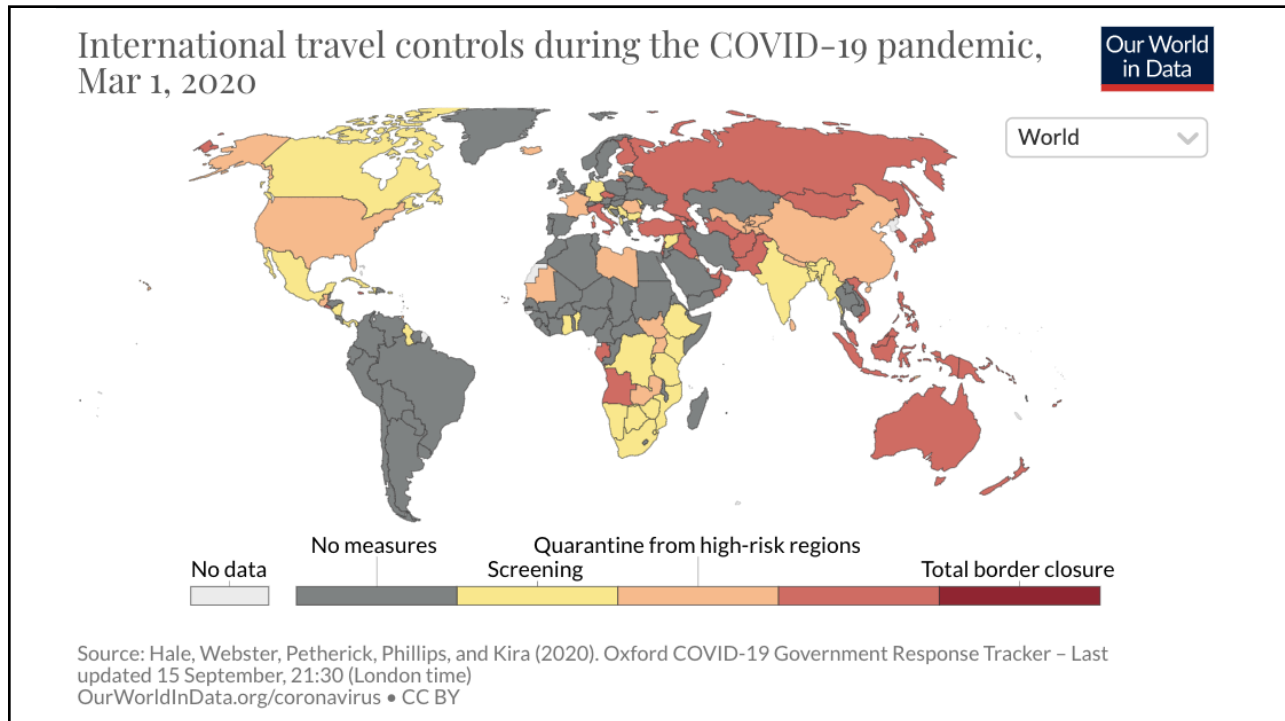
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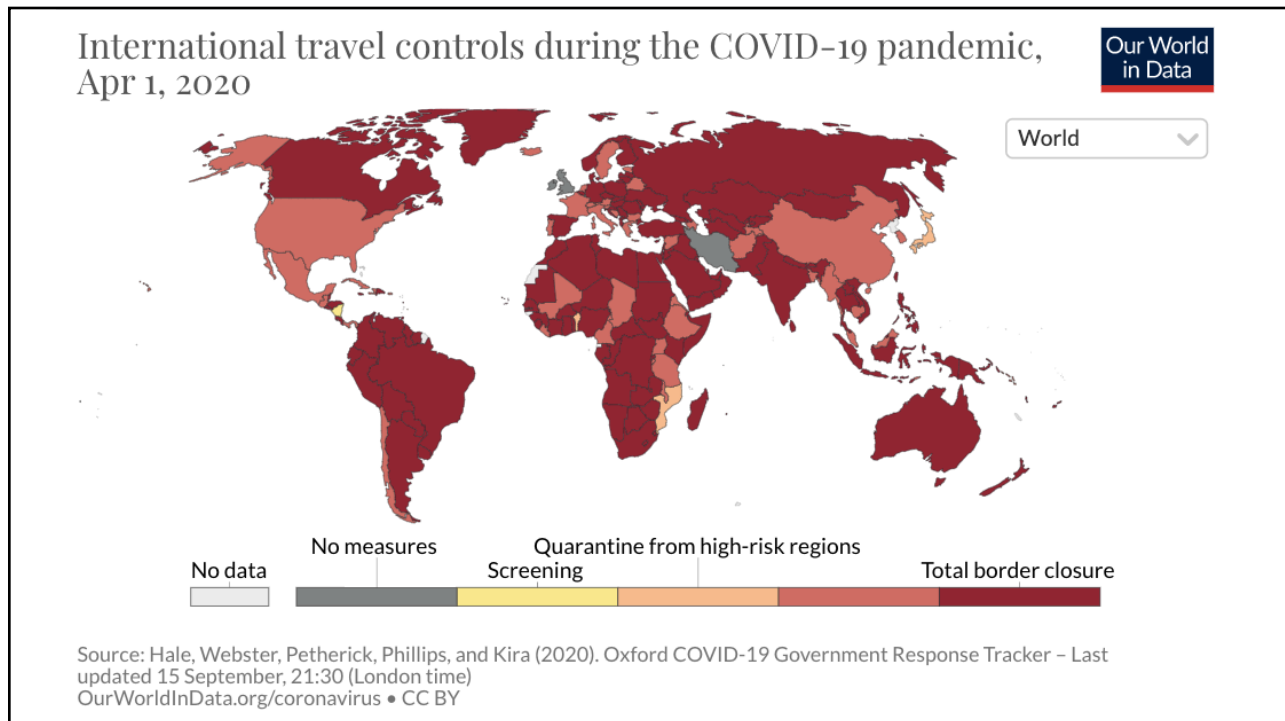
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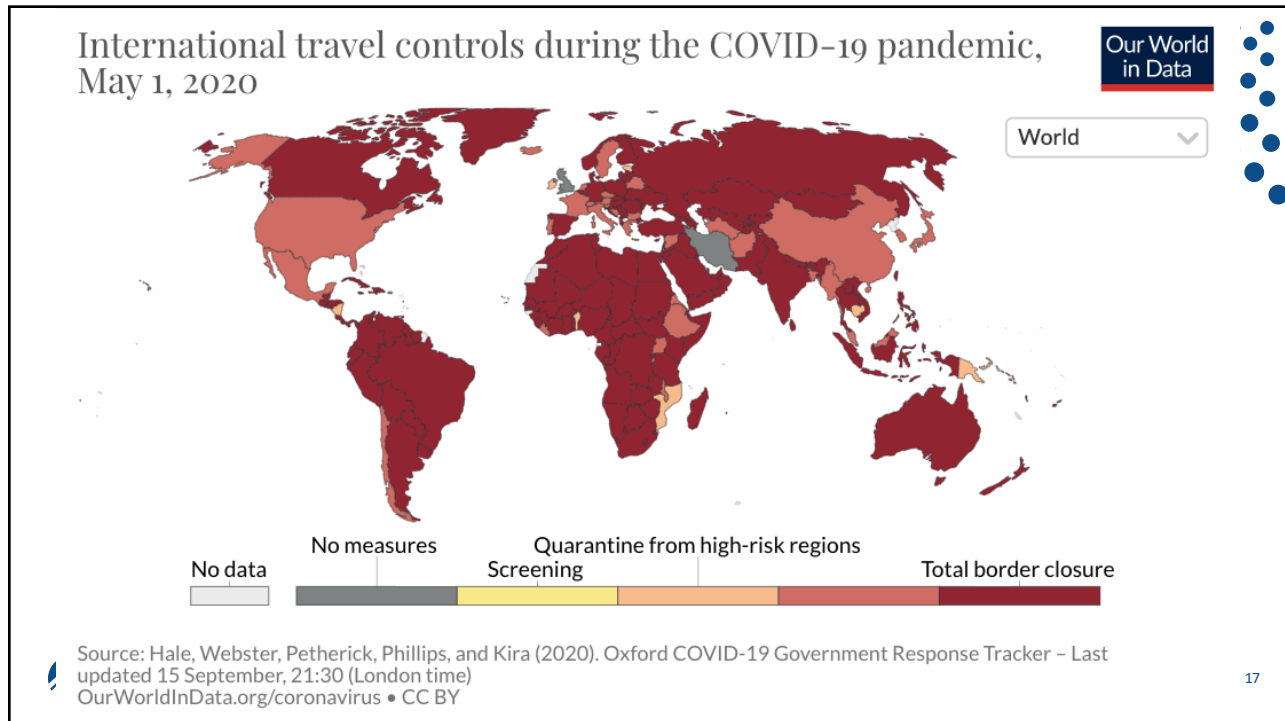


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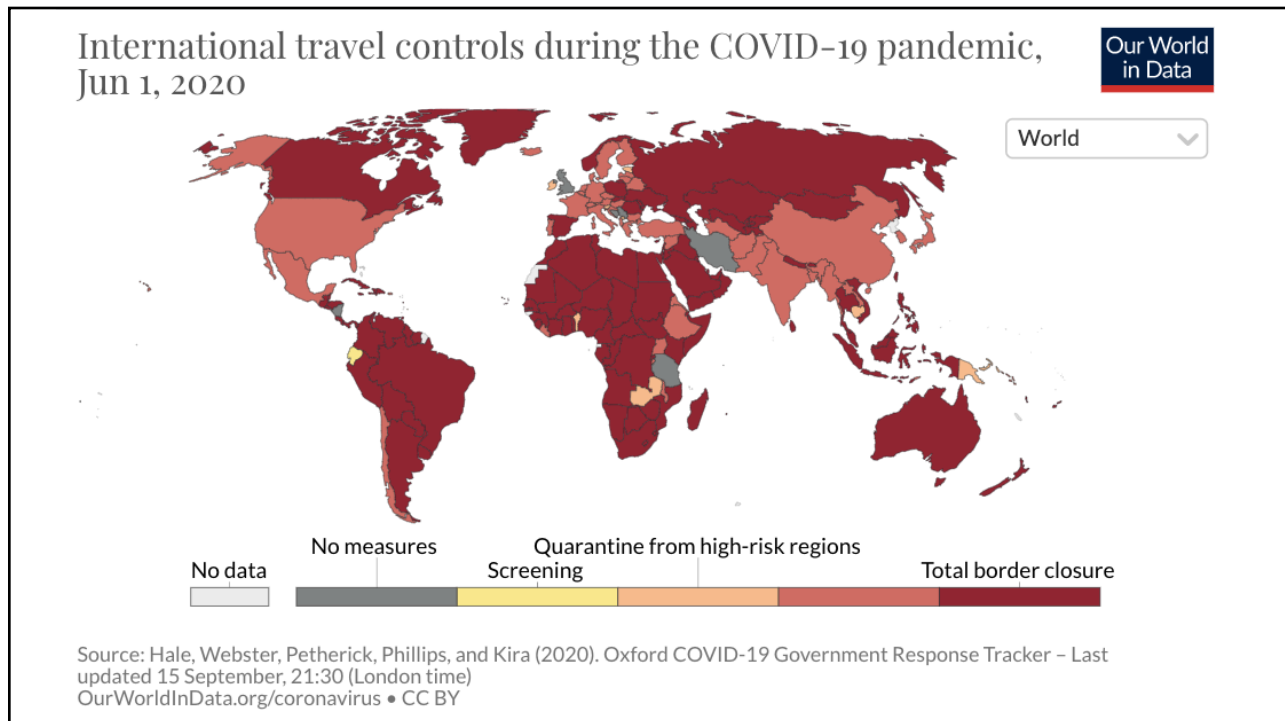


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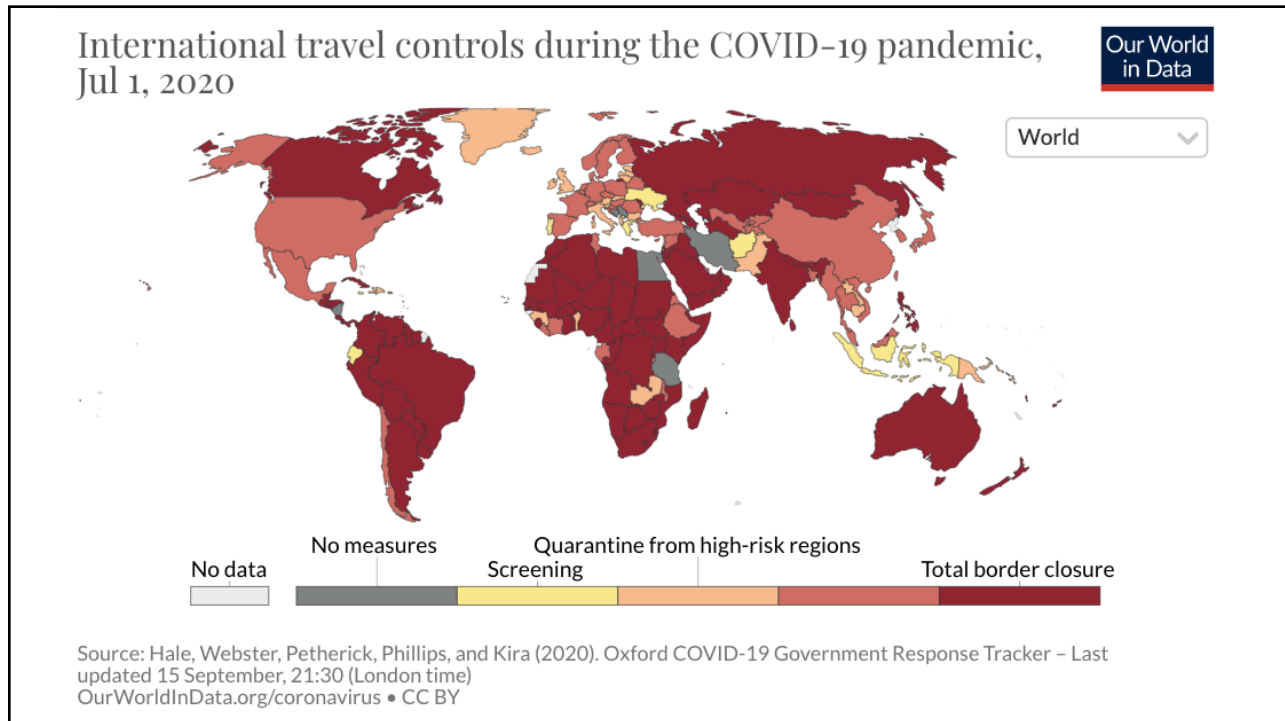




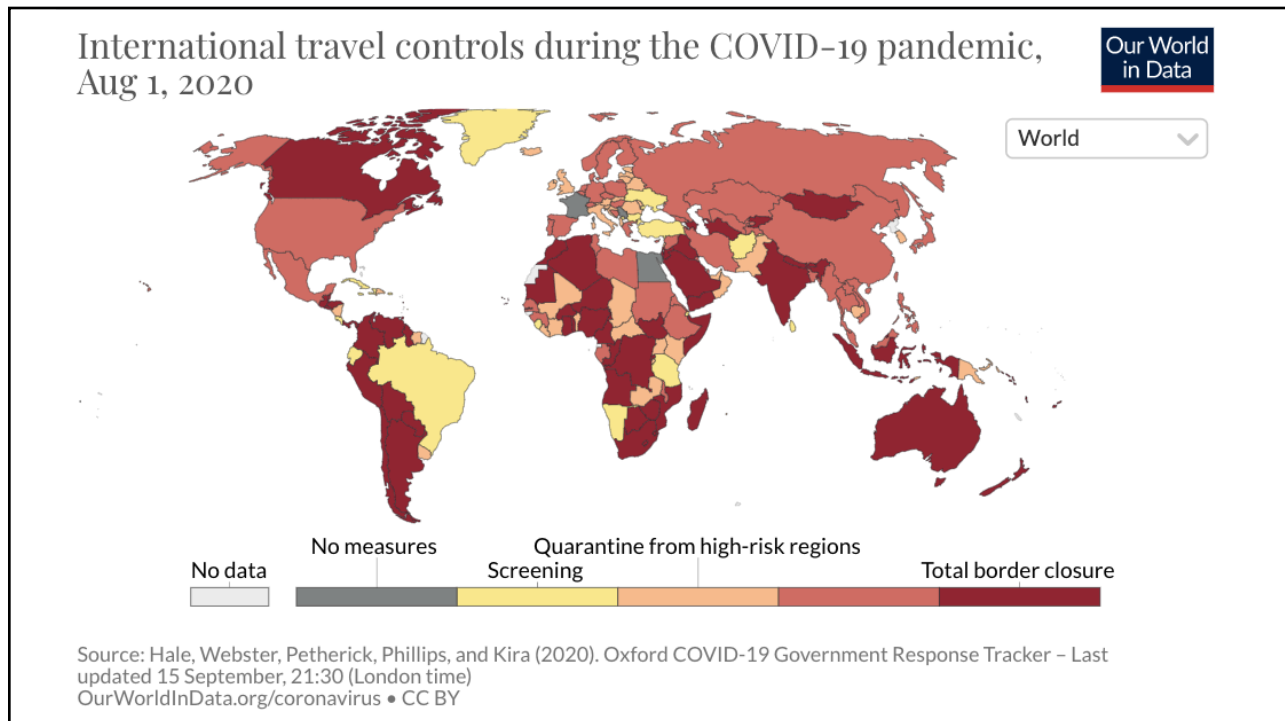
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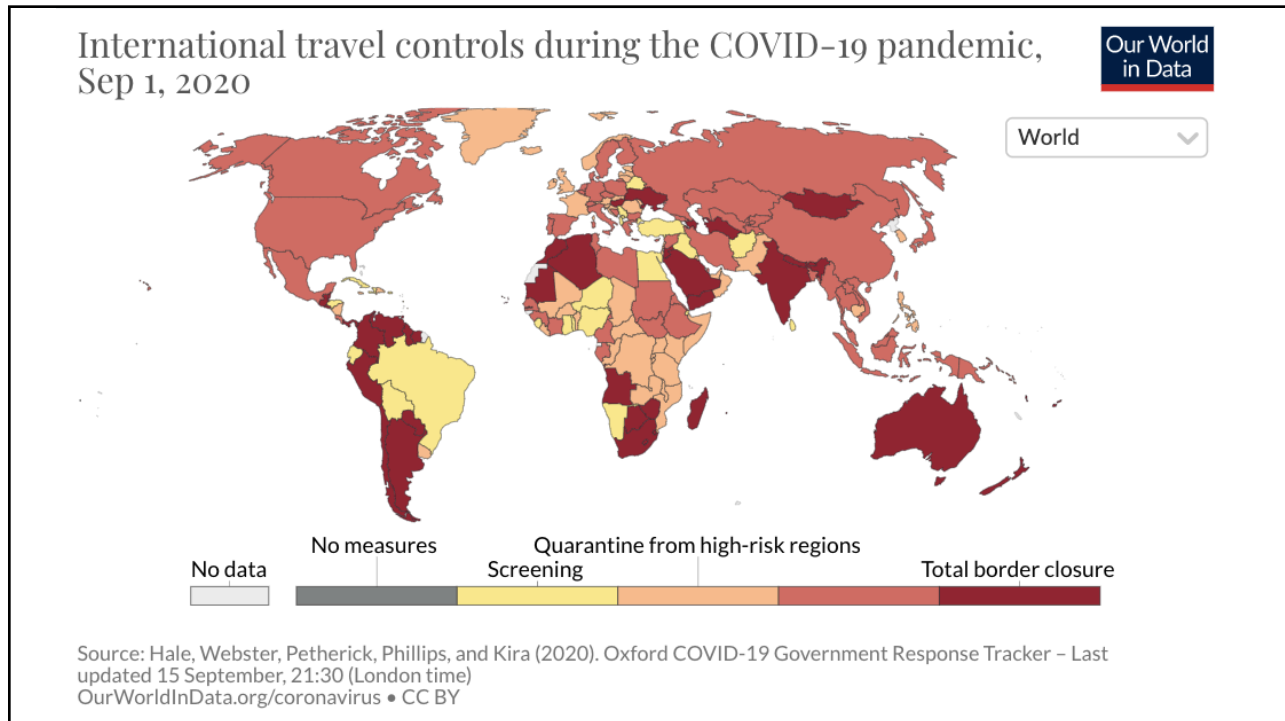
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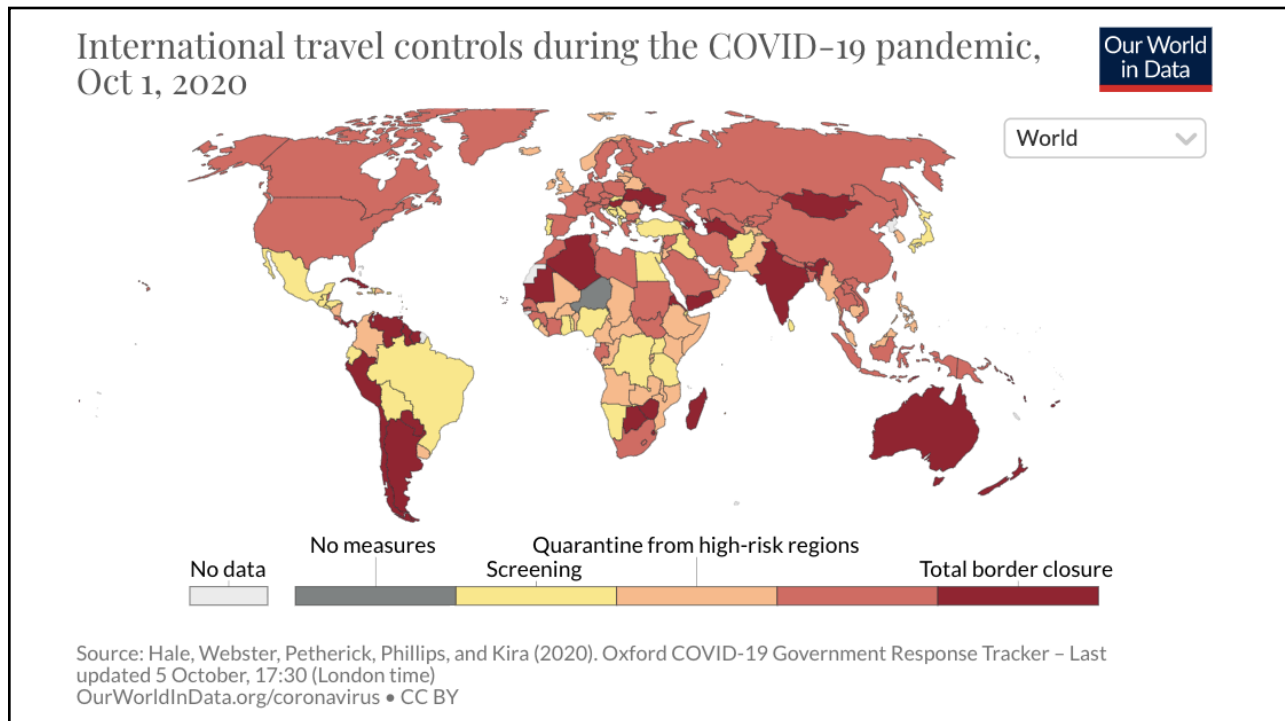
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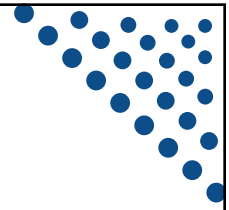
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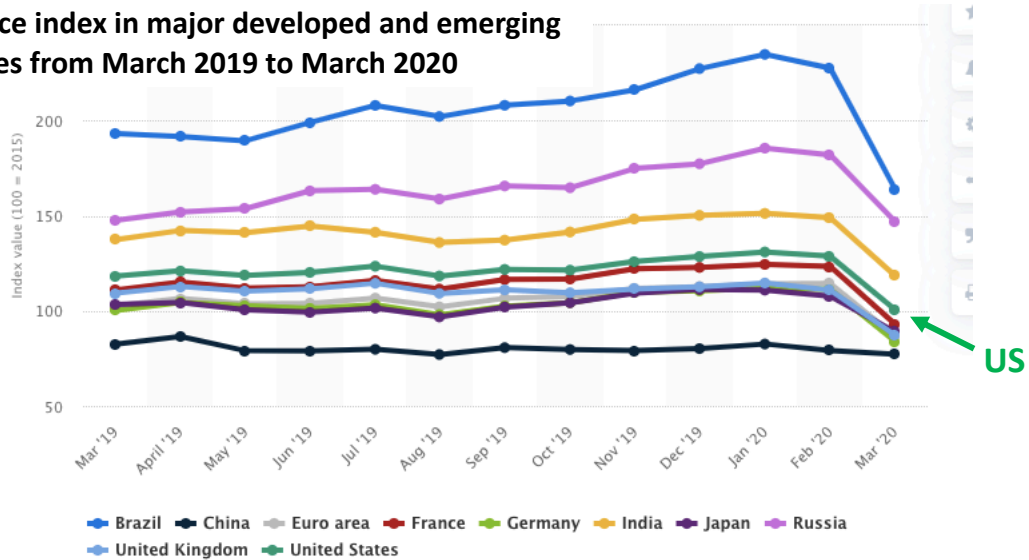
# Stock Markets



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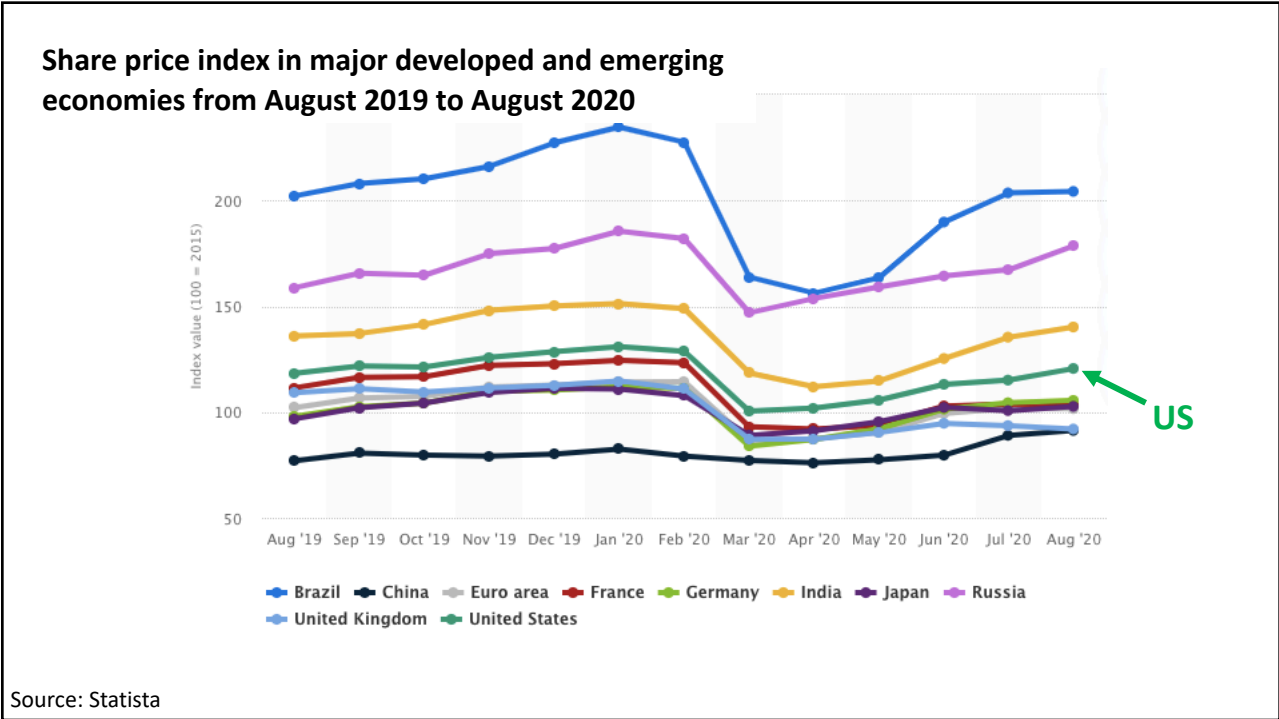
### Share price index in major developed and emerging economies from March 2019 to March 2020



Source: Statista

© Statista 2020 |

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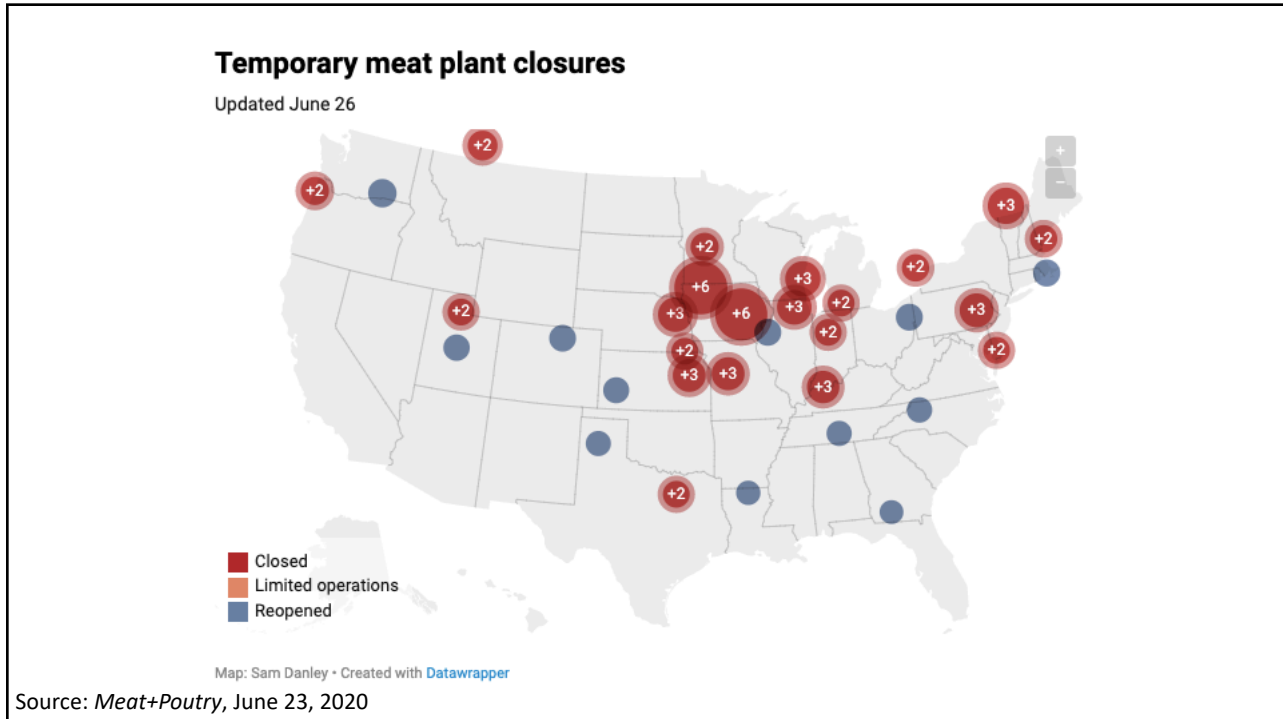
# Factory Shut-downs

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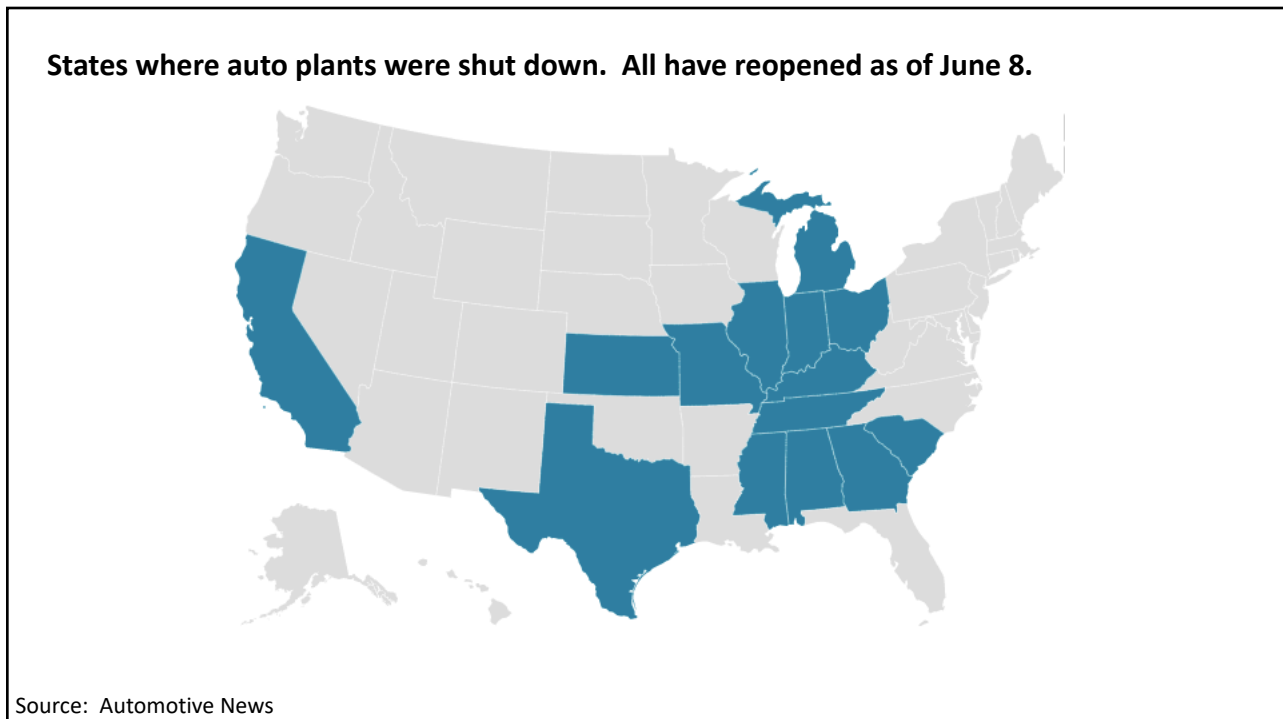
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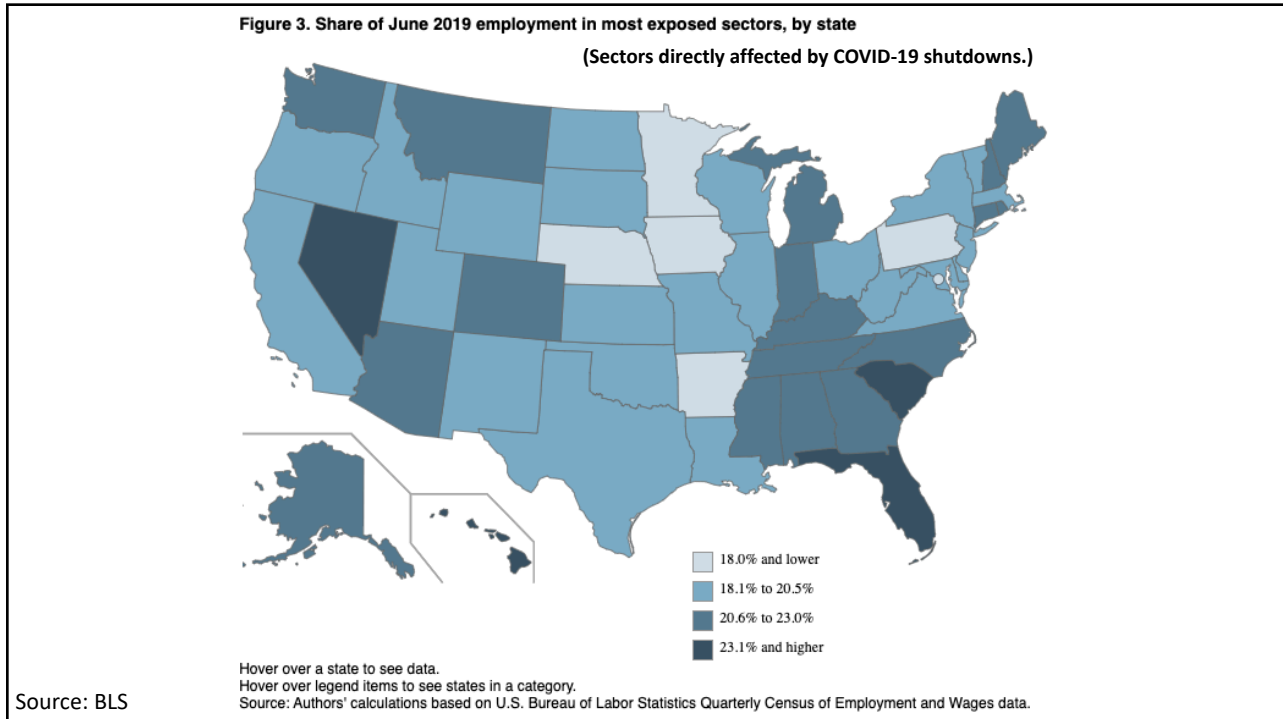
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# Shipping

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# Shipping

## • Headlines on Shipping

- Sep 14 NYT: Trapped by Pandemic, Ships' Crews Fight Exhaustion and Despair
- Sep 5 FT: Covid-19 restrictions threaten shipping lanes and crew
- Jun 7 FT: Shipping industry warns of trade logjam as crews remain stranded
- May 13 FT: Maersk warns of 25% drop in shipping as virus snarls trade
- Mar 6 WSJ: Coronavirus Snarls Trans-Pacific Shipping and Ripples Through U.S. Business
- Feb 28 NYT: Virus Disrupts China's Shipping, and World Ports Feel the Impact"



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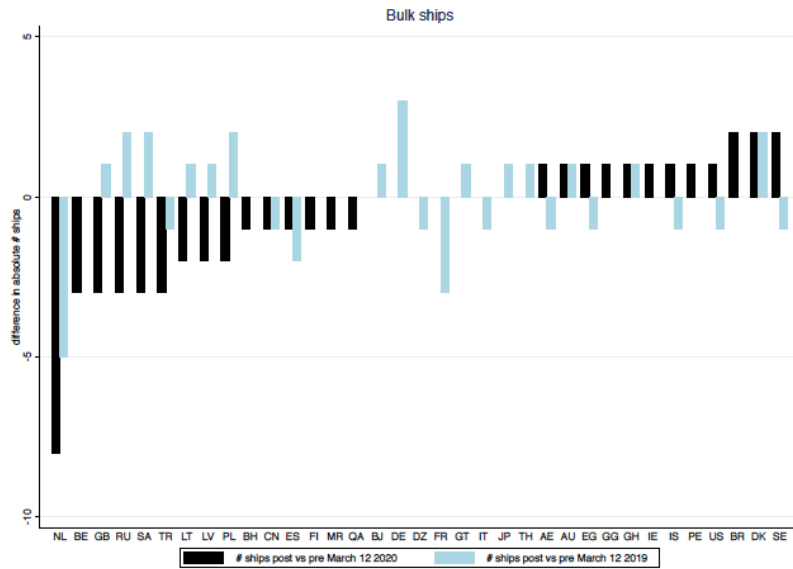
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**Figure 3** Change in departures of bulk ships post vs pre COVID-19 restrictions

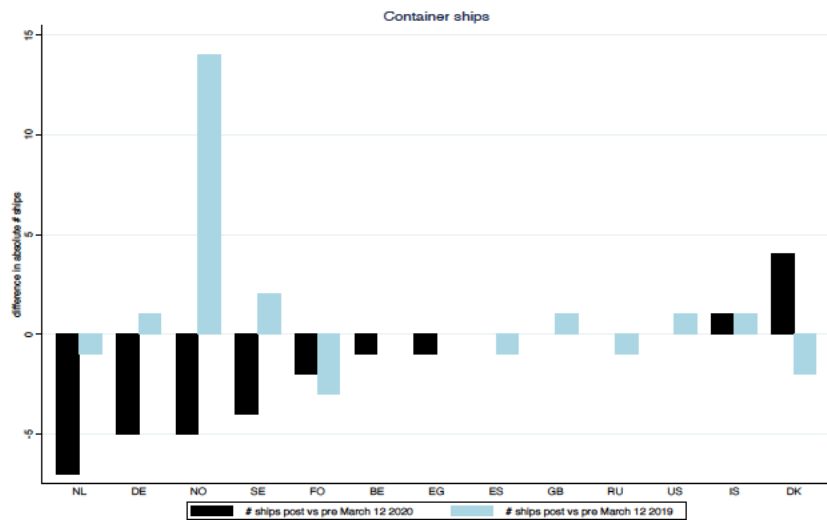


Source: Heiland & Ulltveit-Moe 2020

Note: The pre (post) period spans 35 days prior to (starting on) March 12. Source: <https://kystdatahuset.no/avganger-per-dag>. Accessed 16/04/2020.

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**Figure 4** Change in departures of container ships post vs pre-COVID-19 restrictions



Source: Heiland & Ulltveit-Moe 2020

Note: The pre (post) period spans 35 days prior to (starting on) 12 March 2020. Source: <https://kystdatahuset.no/avganger-per-dag>. Accessed 16 April 2020.

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**Table 2** The impact on COVID-19 on sea transportation

	(1) All	(2) Container	(3) Other Cargo	(4) Tankers
[Date>Mar12] X [year=2020]	-.055*** (.010)	-.078* (.044)	-.033** (.010)	-.158*** (.038)
Pseudo R <sup>2</sup>	.98	.89	.98	.91
Observations	2590	290	1230	1070

Message is that all were negatively affected, and especially tankers.

*Note:* Results are based on a difference-in-difference model comparing the change in the number of departures occurring around 12 March across the years 2020, 2019, and 2018. The dependent variable is the number of departures per week by destination. The data spans five weeks before and five weeks after 12 March for each of the three years. The independent variable is an indicator for weeks after 12 March interacted with an indicator for the year 2020. The model is estimated with a Poisson Pseudo Maximum Likelihood estimator including week x ship-type and year x destination x ship-type fixed effects. Standard errors clustered by destination. \*\*\*, \*\*, \* indicate significance at the 1,5,10% level.

Source: Heiland  
& Ulltveit-Moe  
2020

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**Table 3** The role of crew-change restrictions to seaborne trade in the COVID-19-response

	(1) Container	(2) Other Cargo	(3) Tankers
[Date>Mar12] X [year=2020]			
X [no restrictions]	.066 (.374)	-.036 (.121)	-.083** (.035)
X [restrictions]	-.061** (0.029)	-.031*** (.009)	-.147*** (.046)
X [prohibited]	-.198*** (.038)	0.24 (.068)	-.272*** (.089)
Pseudo R <sup>2</sup>	.89	.98	.91
Observations	290	1230	1070

*Notes:* the results are based on a difference-in-difference model comparing the change in the number of departures occurring around 12 March across the years 2020, 2019, and 2018. The dependent variable is the number of departures per week by destination. The data spans five weeks before and five weeks after 12 March for each of the three years. The independent variable is an indicator for weeks after 12 March interacted with an indicator for the year 2020 and interacted with an indicator distinguishing between countries that have imposed no restrictions, some restrictions, or fully prohibited crew changes at their ports. The model is estimated with a Poisson Pseudo Maximum Likelihood estimator including week and year x destination fixed effects. Standard errors clustered by destination. \*\*\*, \*\*, \* indicate significance at the 1,5,10% level.

Source: Heiland  
& Ulltveit-Moe  
2020

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# Supply Chains

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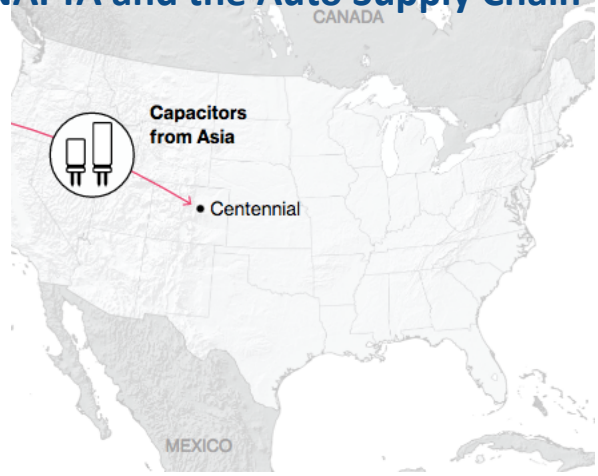
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## NAFTA and the Auto Supply Chain

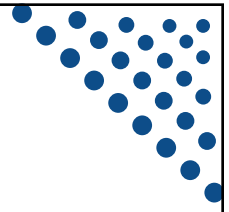



 Black, Diamond, and Merrill, "One Tiny Widget's Dizzying Journey Shows Just How Critical Nafta Has Become," *Bloomberg*, February 2, 2017.

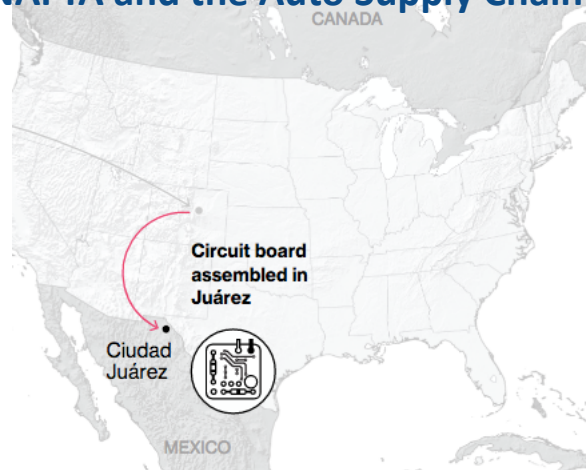
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## NAFTA and the Auto Supply Chain



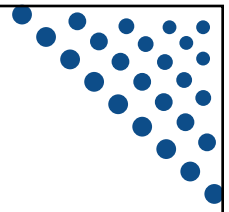
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Black, Diamond, and Merrill, "One Tiny Widget's Dizzying Journey Shows Just How Critical Nafta Has Become," *Bloomberg*, February 2, 2017.

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## NAFTA and the Auto Supply Chain



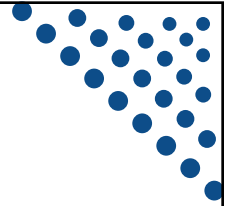
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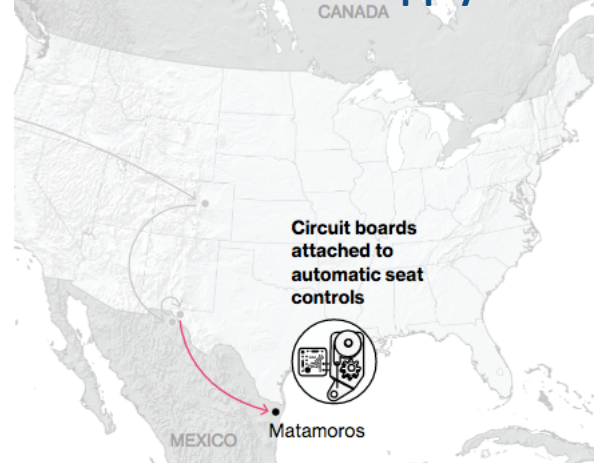
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### NAFTA and the Auto Supply Chain



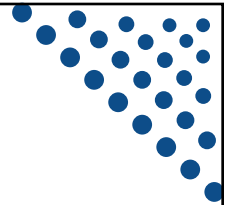
NATIO  
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Black, Diamond, and Merrill, "One Tiny Widget's Dizzying Journey Shows Just How Critical Nafta Has Become," *Bloomberg*, February 2, 2017.

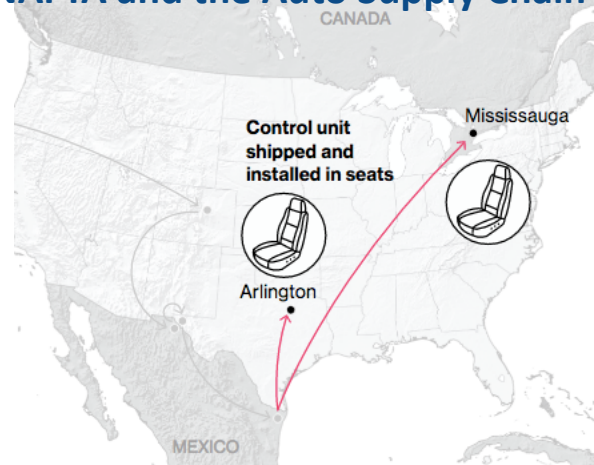
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### NAFTA and the Auto Supply Chain



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Black, Diamond, and Merrill, "One Tiny Widget's Dizzying Journey Shows Just How Critical Nafta Has Become," *Bloomberg*, February 2, 2017.

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### NAFTA and the Auto Supply Chain

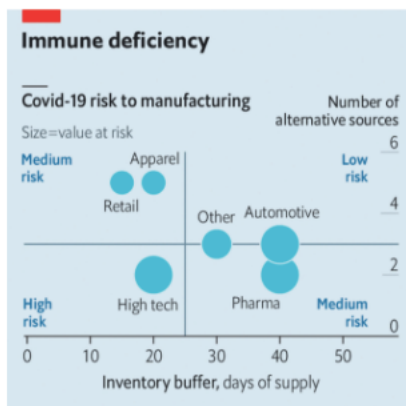
Seats installed at nearby auto assembly plants

**NATIO EDUCA** Black, Diamond, and Merrill, "One Tiny Widget's Dizzying Journey Shows Just How Critical Nafta Has Become," *Bloomberg*, February 2, 2017.

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The new coronavirus could have a lasting impact on global supply chains



What sectors are most vulnerable?  
Those with small inventories and few alternative sources.

Source: *Economist* Feb 15, 2020

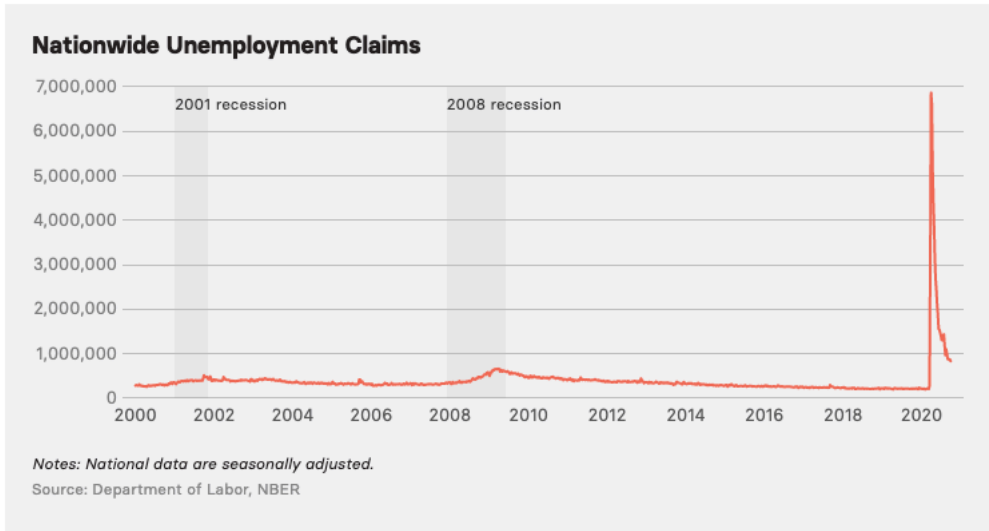
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## Supply Chains

### • Quotes from News:

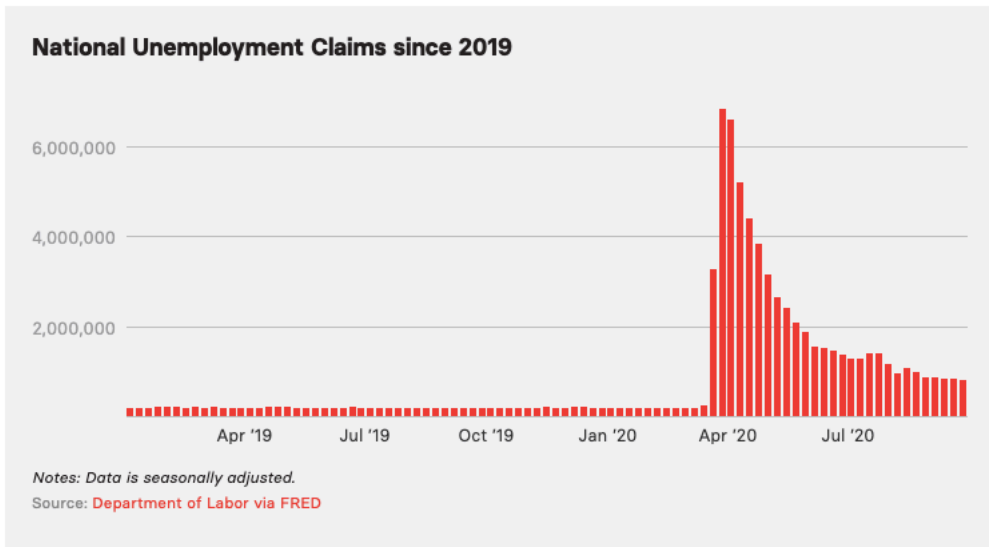
- Stranded crews pose a risk to supply chains (*FT* 9/28/20)
- Covid-19 has exposed the world's fragile, complex food supply chains (*FT* 9/24/20)
- Pandemic shows US must make vital products at home (Kevin McCarthy 8/23/20) [House Minority Leader]
- Covid-19 and other risks mean quarter of products could be sourced from new countries in 5 years (*FT* 8/8/20)
- Will coronavirus pandemic finally kill off global supply chains? (*FT* 5/28/20)
- Steep Drop in Trade Flows Shows Pitfalls of Cross-Border Supply Chains (*WSJ* 5/26/20)
- Covid-19 crisis has laid bare weaknesses in supply chains (*FT* 5/11/20)

# Unemployment



Source: *Buzzfeed*

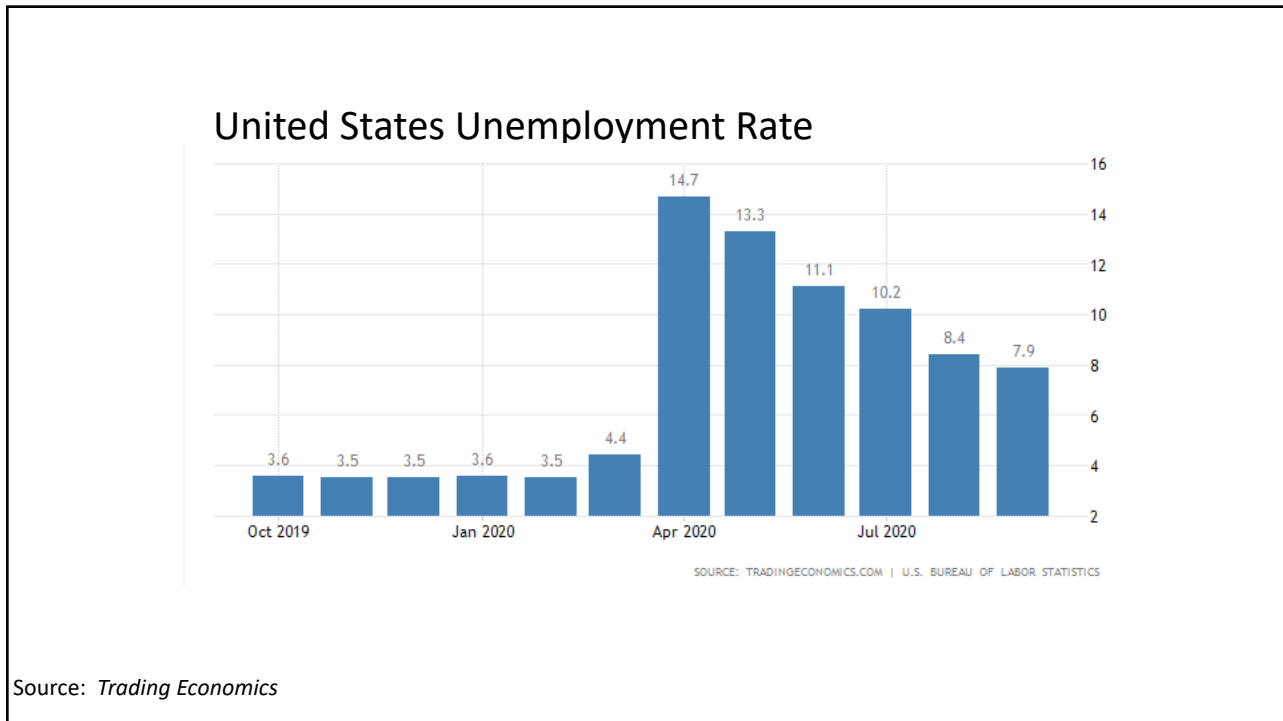
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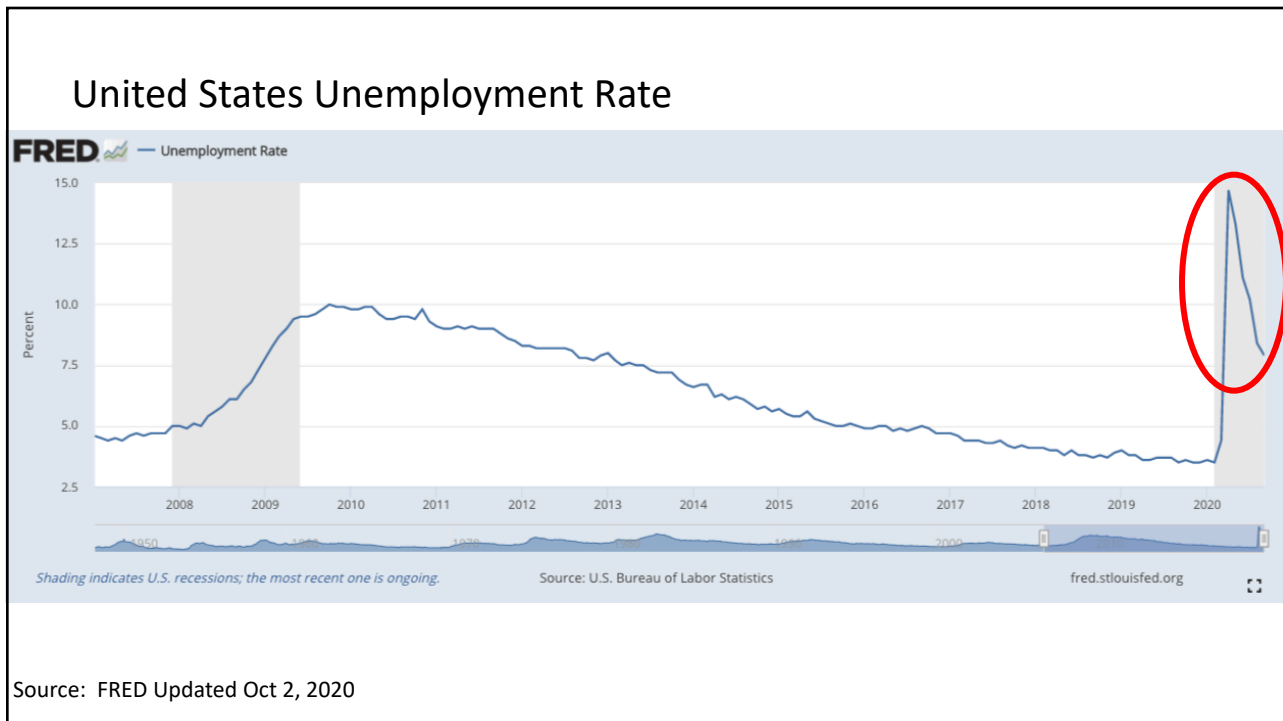
Source: *Buzzfeed*

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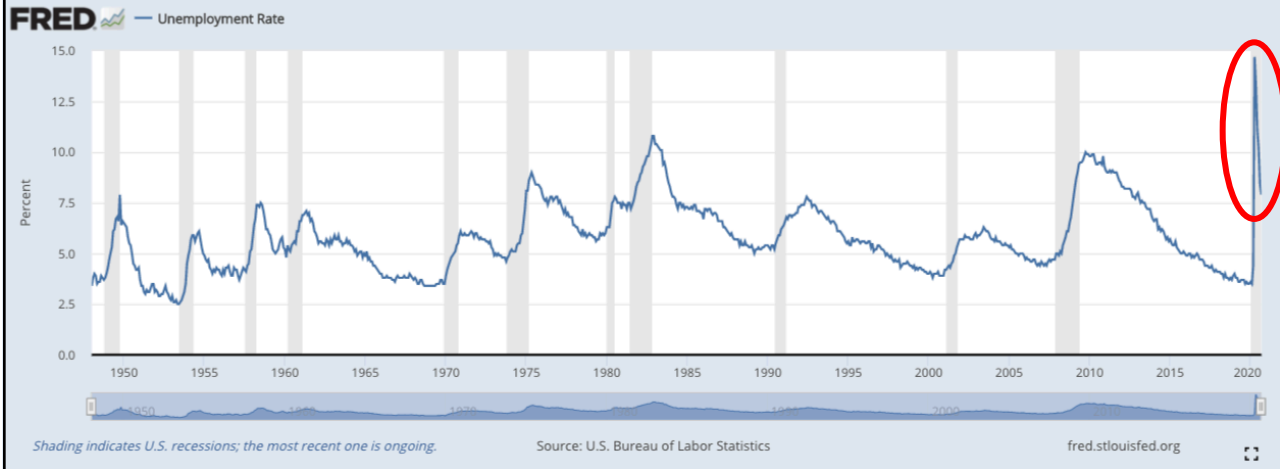


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# United States Unemployment Rate



Source: FRED Updated Oct 2, 2020

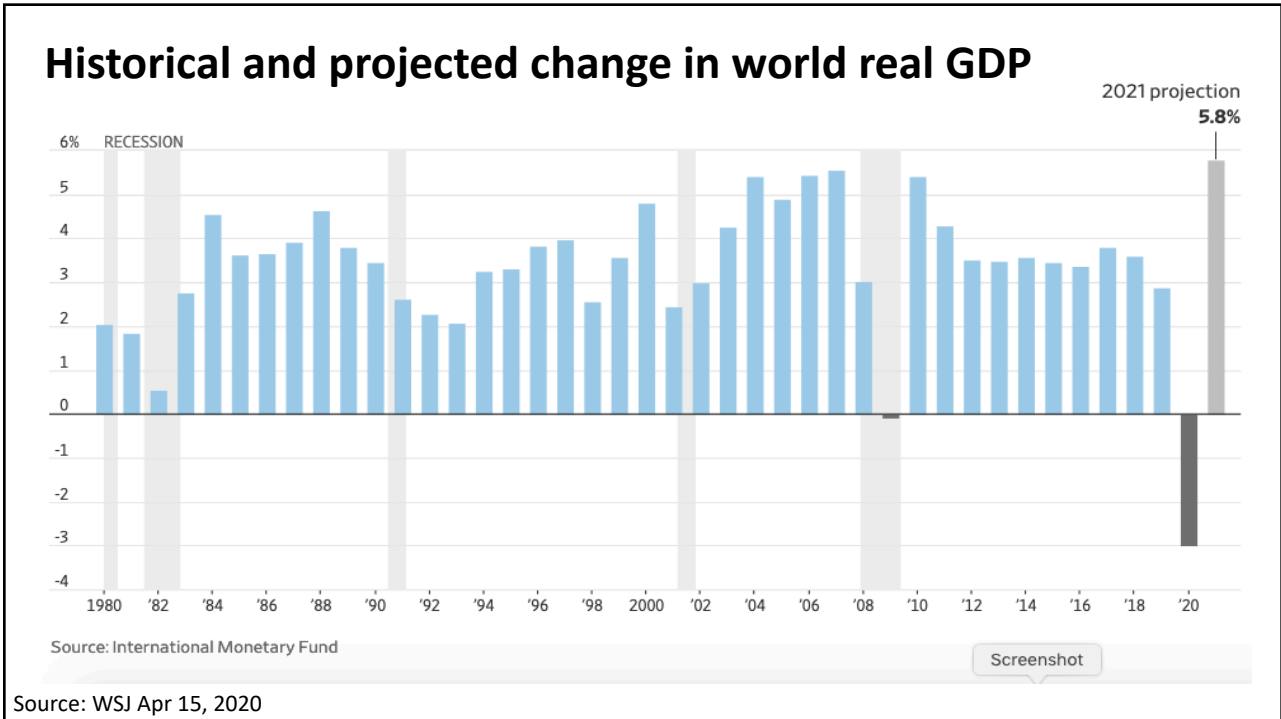
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# GDP

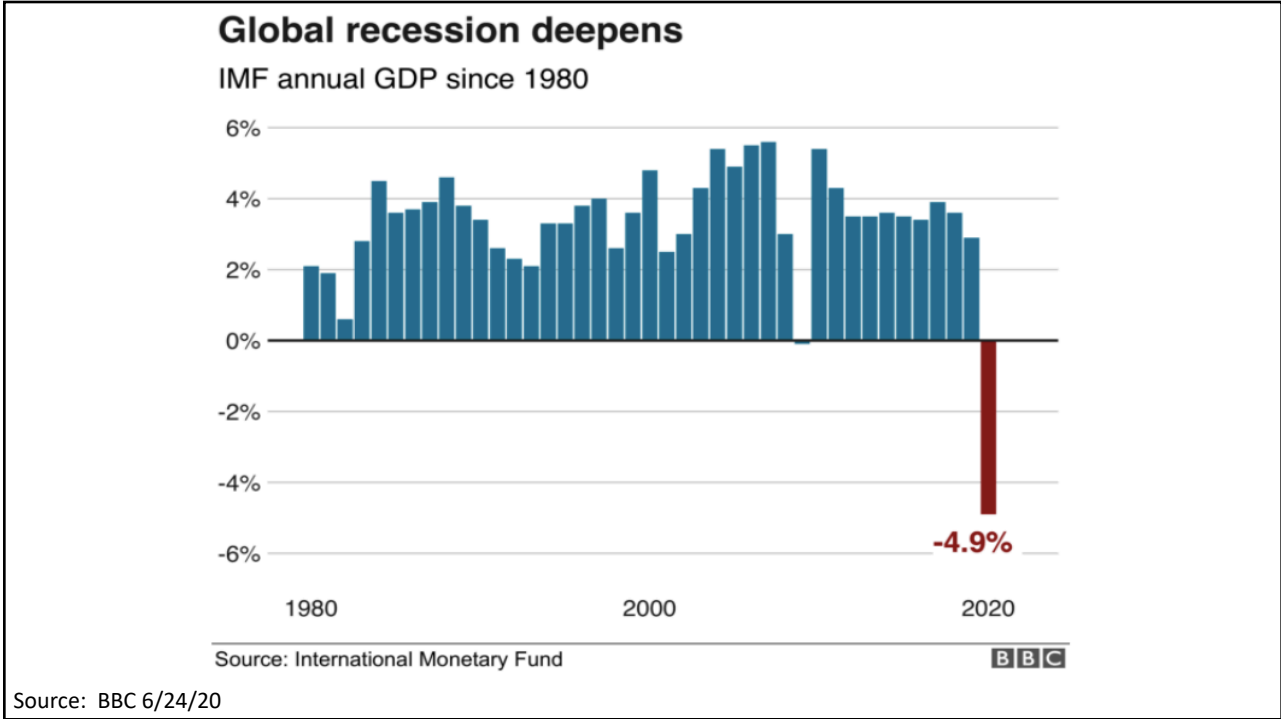
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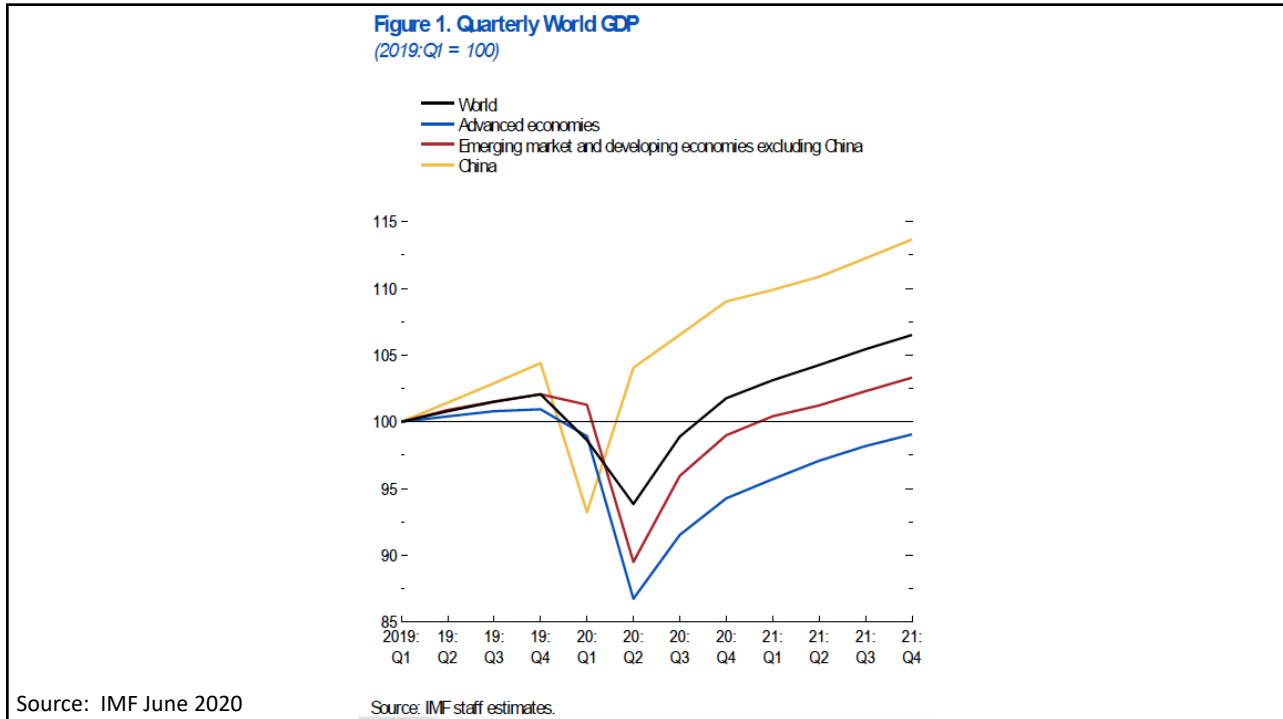
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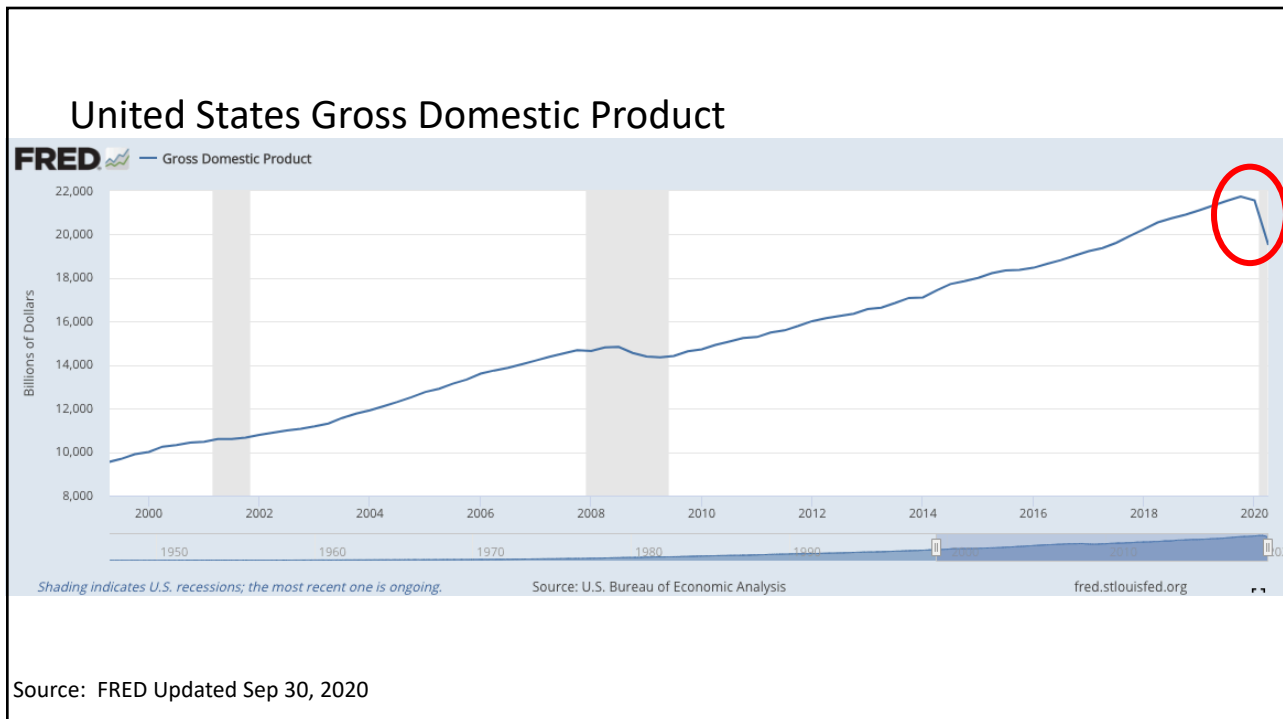
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Source: FRED Updated Sep 30, 2020

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# Shortages

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## Shortages

- **Medical Related**
  - Personal protective equipment
  - Medical devices
  - Sanitizing products
  - ICU beds
  - Diagnostic tests and their ingredients

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# Shortages

- **Lock-down Related**

- Toilet paper, paper towels
- Coins
- Condoms
- Meats
- Soft drinks (due to aluminum shortage)
- Appliances
- Lumber



Source: Penn Today



The parts department at Village Ford in Dearborn, Michigan on Thursday, March 5, 2020. (Photo: Eric Seals, Detroit Free Press)

Source: Detroit Free Press

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## Effects on Trade Policies

- **Effects of the Pandemic on Trade Policies**

- Export Policies
- Import Policies

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## Effects on Export Policies

### • Effects of the Pandemic on Export Policies

- Export bans on
  - Medical supplies
  - Food



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## Effects on Export Policies

### • Headlines on Export bans

- Apr 10, Bloomberg: Food Supply Fears Are Growing as Romania **Bans Grain Exports**
- Apr 8, WSJ: U.S. to **Restrict Mask, Glove Exports** for Four Months During Coronavirus Pandemic
- Apr 8, WP: As **borders harden** during pandemic, some countries look to hold on to their own food
- Apr 3, Reuters: Trade **Restrictions on Food Exports** Due to the Coronavirus Pandemic
- Mar 19, VOX<sup>EU</sup>: Sickening thy neighbour: **Export restraints** on medical supplies during a pandemic



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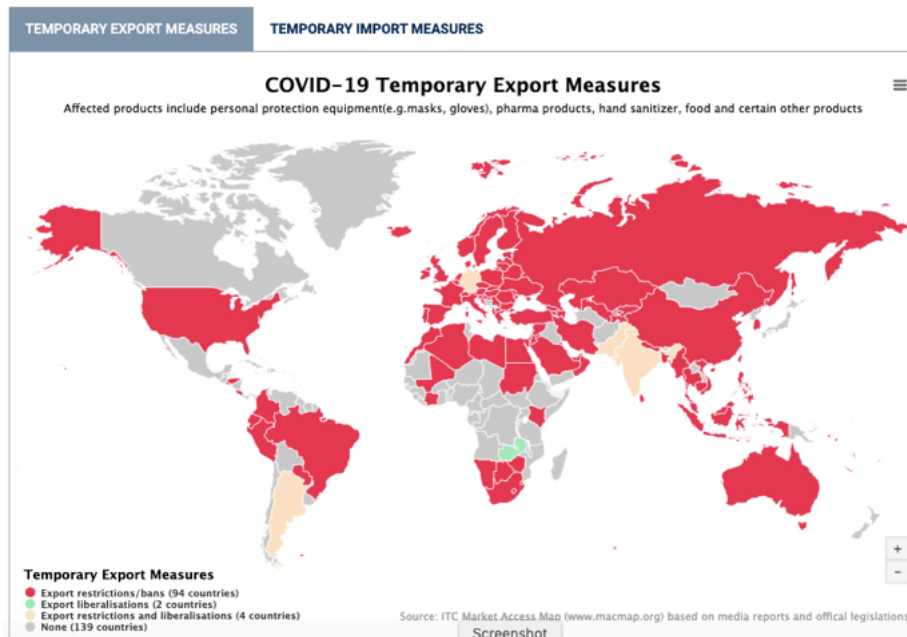
## Effects on Export Policies

### • Headlines on Export bans

- Jun 24, NYT: Warren and Booker **Press Meatpackers on Exports** to China
- May 28, WSJ: **'Vaccine Nationalism':** A New Dynamic in the Race to Quash Coronavirus
- Apr 11, WSJ: China **Tightens Customs Checks** for Medical Equipment Exports

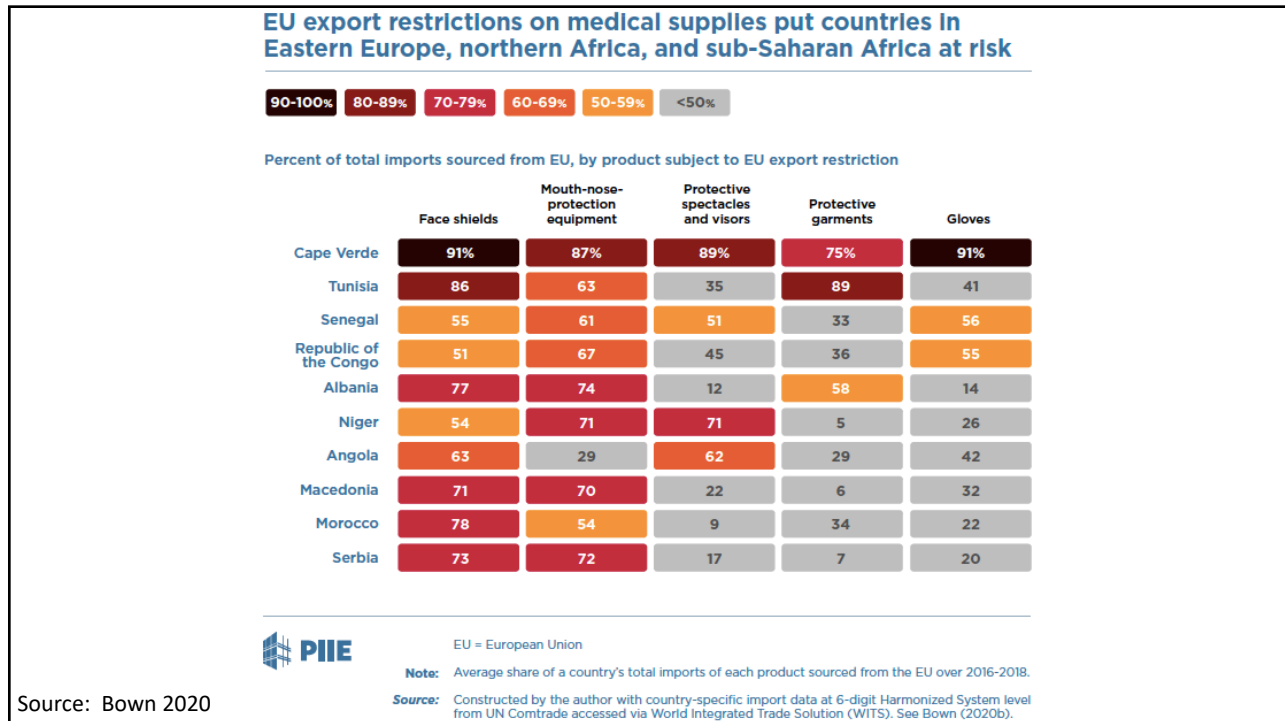
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### I. Global map of COVID-19 temporary trade measures (September 11, 2020)

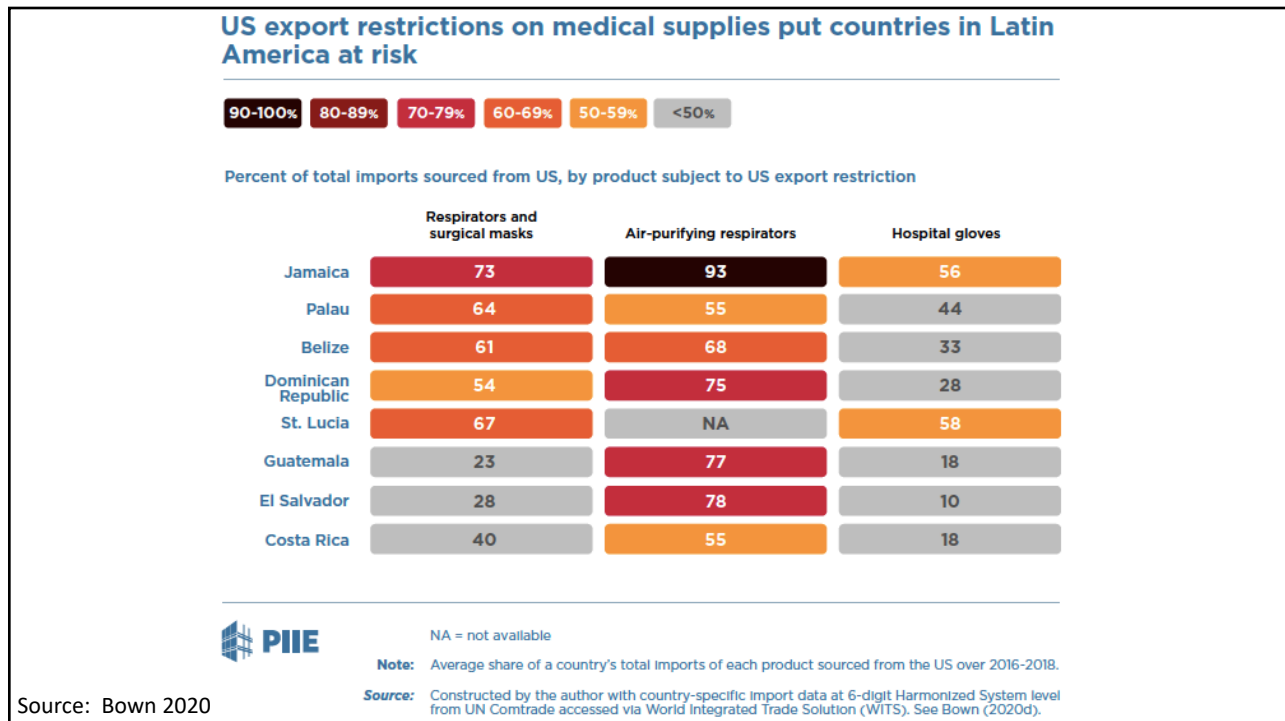


Source: ITC

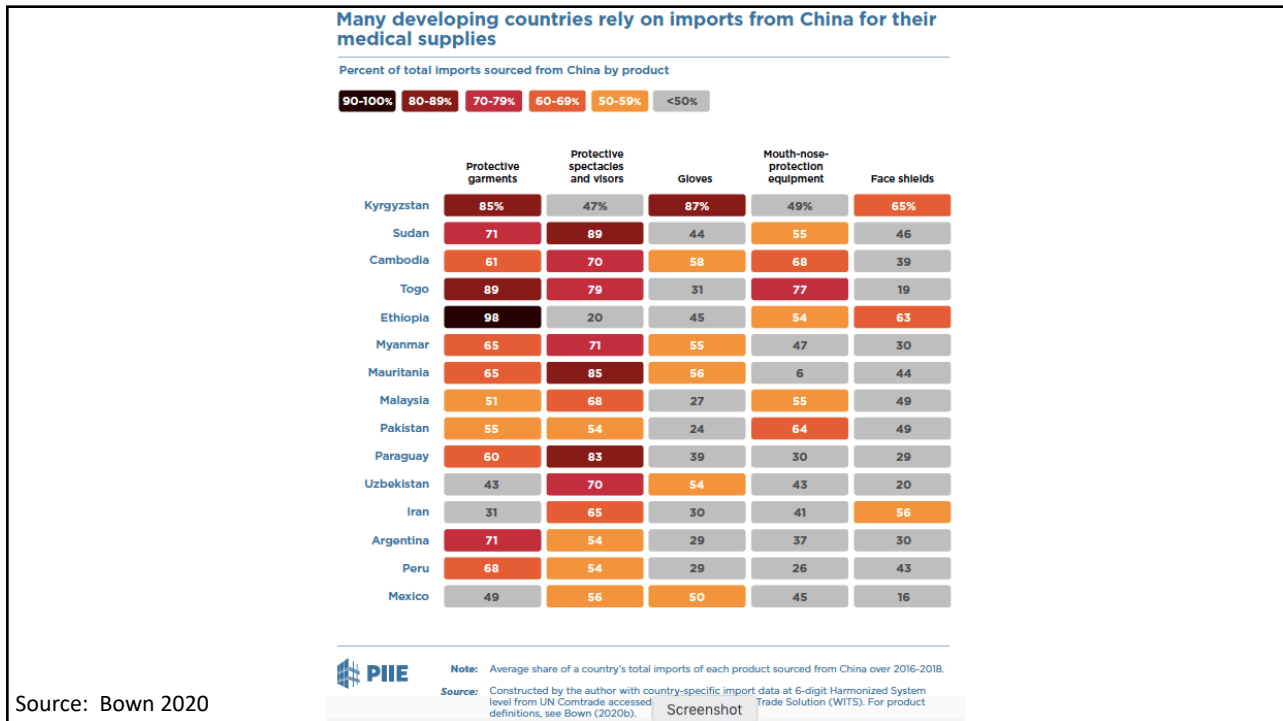
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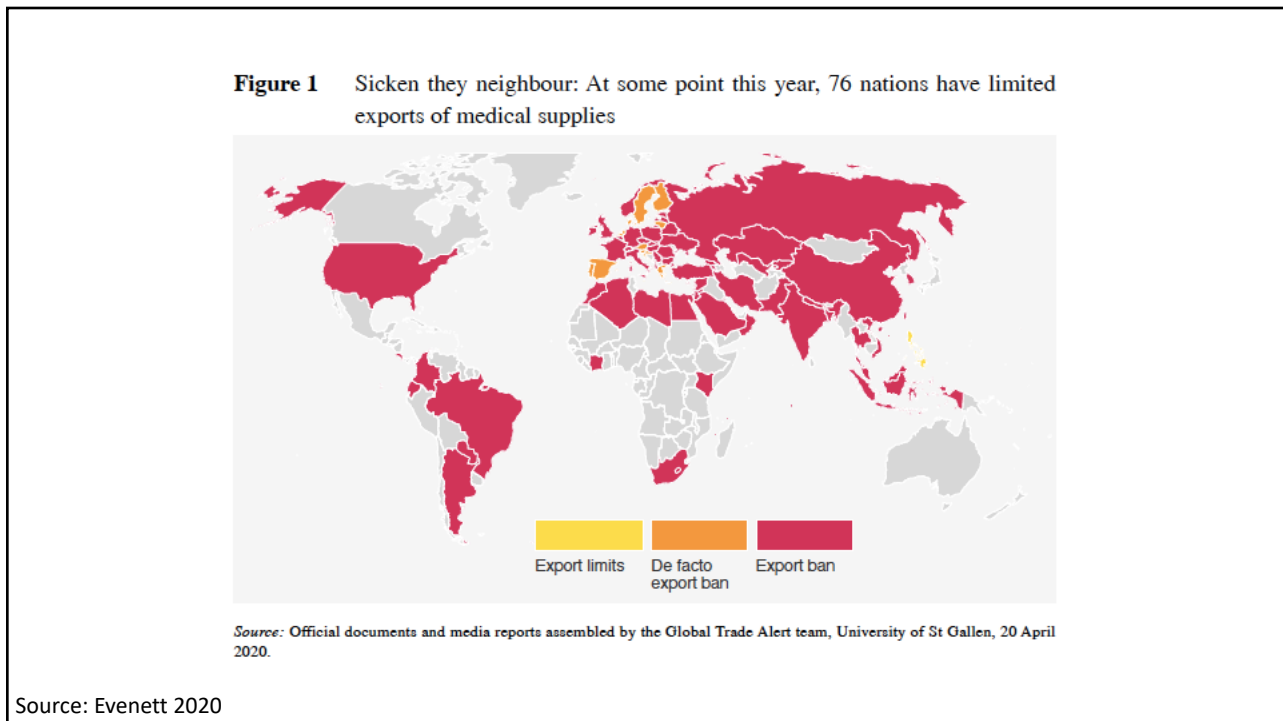
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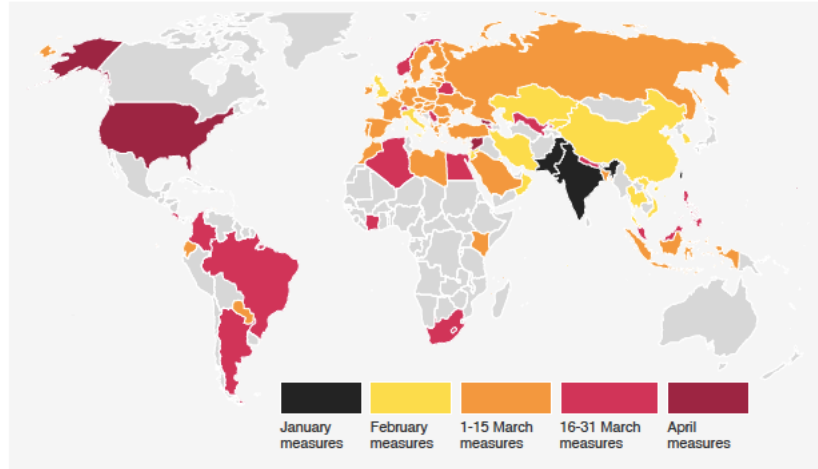


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**Figure 2** New export curbs on medical supplies accelerated in March 2020

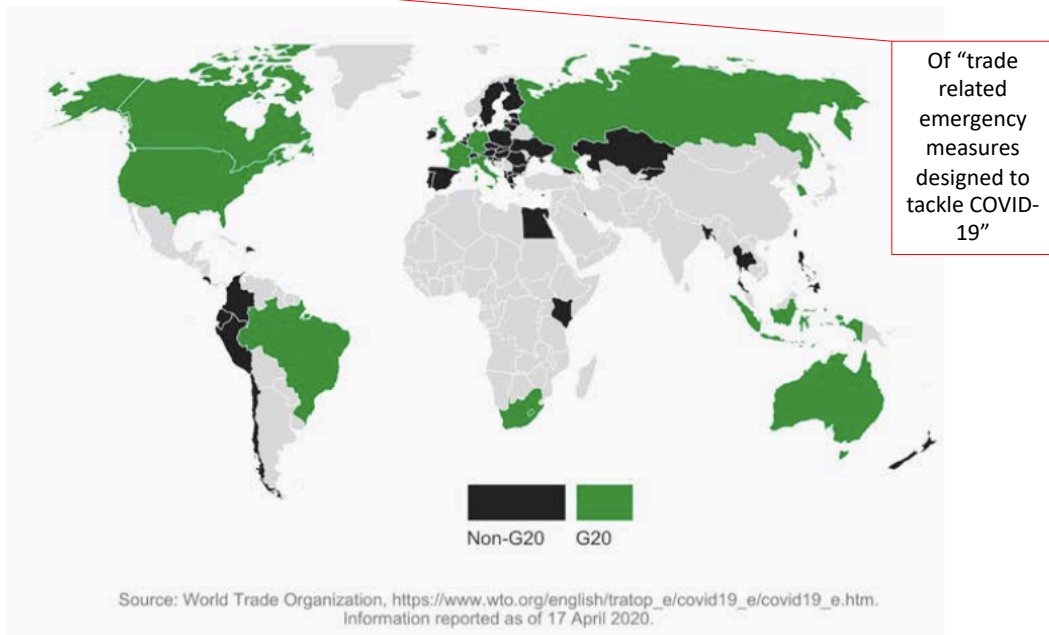


Source: Official sources and media reports assembled by the Global Trade Alert team, University of St Gallen, 20 April 2020. Date of first relevant policy intervention used to prepare this map: 24 January 2020

Source: Evenett 2020

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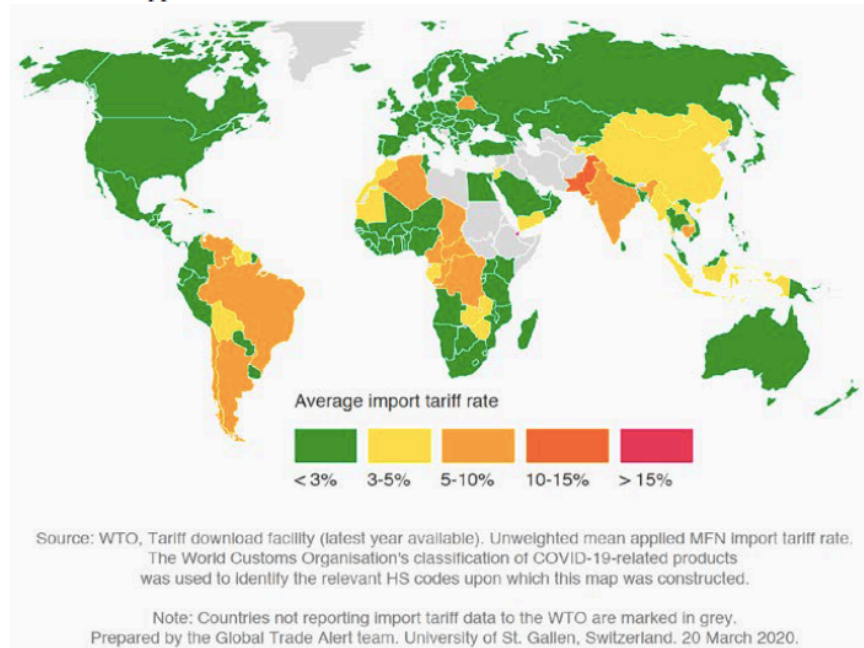
**Figure 1** COVID-19 notifications to the WTO as of 17 April 2020



Source: Wolfe 2020

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**Figure 2** 110 WTO Members still tax imports of COVID-19 test kits and related apparatus

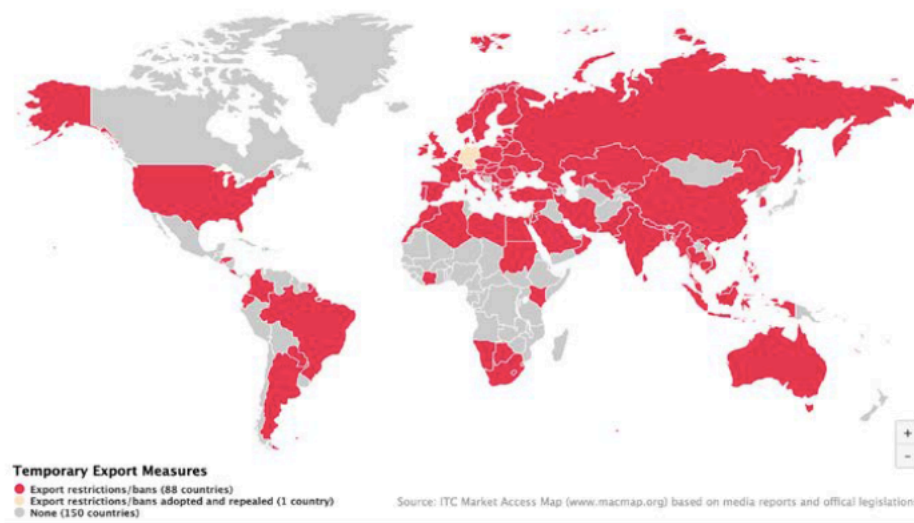


Source:  
Wolfe  
2020

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**Figure 3** Global map of COVID-19 temporary trade measures (18 April 2020)

Affected products include personal protection equipment (e.g. masks, gloves), pharma products, hand sanitizer, food and certain other products



Source:  
Wolfe  
2020

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**Table 1** Initiatives benefiting exporters announced as part of COVID-19 stimulus packages (reported by the IMF)

Government	Initiative and, where available, additional funds committed
Angola	Central bank alters regulations on private banks to encourage lending to firms who advance export-promotion and import-substitution goals.
Austria	€9-billion fund for guarantees for firms, including exporters
Bangladesh	\$588 million to support trade finance at Bangladesh Bank; funding of Export Development Fund increased to \$5 billion
Egypt	Increased 'subsidy payout' to exporters
Finland	€4.2 billion more to the Export Credit Agency for lending and guarantees for SMEs
Germany	€100 billion for national development bank that also grants trade finance
Hungary	Three new export credit programmes introduced
India	Reserve Bank relaxed repatriation limits for exporters
Jordan	Certain activities of export-oriented industries, such as pharmaceuticals, potash, and phosphates, exempted from lockdown
Myanmar	Two percent advance income tax on exports waived until the end of the fiscal year
Pakistan	Accelerated tax refunds to export industries (outlay approximately \$600 million)
Spain	Up to €2 billion for guarantees to exporters given by the Spanish Export Insurance Credit Agency.
Sweden	Expansion of the credit guarantee framework of the Export Credit Agency
Turkey	Three new distinct programmes for exporters
Zambia	Export duties on metals suspended

Source:  
Wolfe  
2020

Source: International Monetary Fund, "Policy responses to COV-2019" in 19 April 2020.

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## Effects on Import Policies

### • Effects of the Pandemic on Import Policies

- Import expansion
  - Tariff reductions
- Import contraction
  - Tariff increases
  - Import bans
  - Government procurement

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## Effects on Import Policies

### • Headlines on Import Expansion

- Apr 20 FT: **Trump exempts** virus-hit US businesses from import tariffs
- Apr 13 WSJ: U.S. **Tariffs Hamper Imports** of Sanitizer, Disinfectants, Some Companies Say
- Apr 2 NYT: Trump Rebuffs Demands to **Lift Tariffs** as Economy Falters
- Mar 31 FT: Trump to **suspend some tariffs** for 90 days
- Mar 26 WSJ: U.S. Will Approve Some **Delays in Tariff Payments** Amid Coronavirus Crisis
- Mar 24 FT: **Drop the tariffs** and save some lives. Quick
- Mar 19 WSJ: Trump Spurns Business **Plea to Ease Tariffs** Amid Coronavirus
- Mar 16 NYT: U.S. Weighs **Tariff Relief** but Some Fear China Will Take Advantage



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## Effects on Import Policies

### • Headlines on Import Contraction

- Aug 23 FT: McCarthy: Pandemic shows US must **make vital products at home**
- Aug 17 FT: Guangzhou **bans frozen meat imports** over virus fears
- Aug 6 FT: Donald Trump to order government to **buy medicines from US** companies
- May 30 WSJ: **Protectionism Spreads** Globally With the New Coronavirus
- May 10 FT: U.S. Multinationals fear **rise in protectionism** because of pandemic

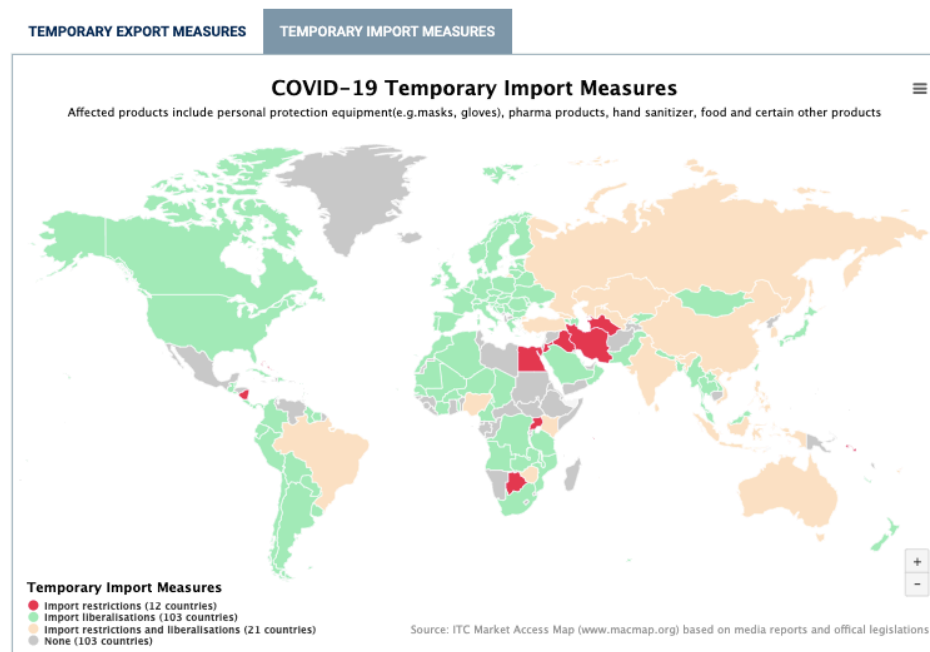


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## I. Global map of COVID-19 temporary trade measures (October 2, 2020)



Source: ITC

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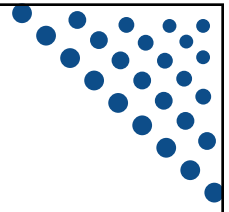
## Conclusion

- **The Covid-19 Pandemic has had**
  - Devastating effects on the global economy
  - Serious effects on global trade
  - Mostly adverse effects on international trade policies
- **How much of this will be permanent remains to be seen**

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**Thank you!**



# Thank you! Any Questions?

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