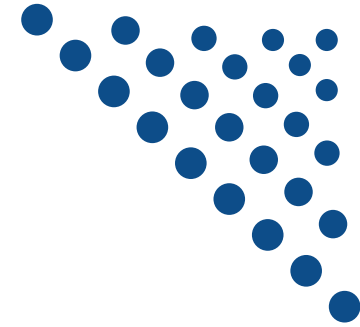


National Economic Education Delegation



- **Vision**

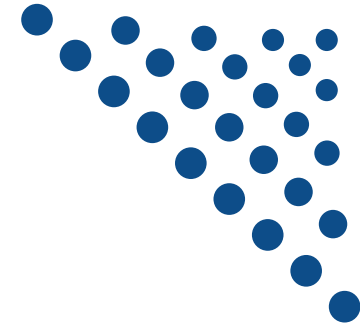
- One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.

- **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.

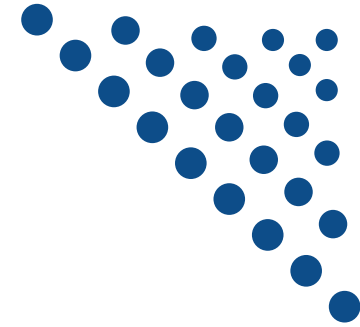


Globalization: Its Rise and Perhaps Its Fall

Alan V. Deardorff
University of Michigan

NEED Webinar
April 24, 2020

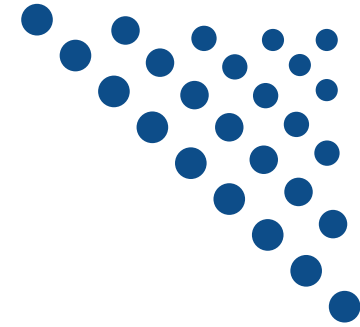
Outline

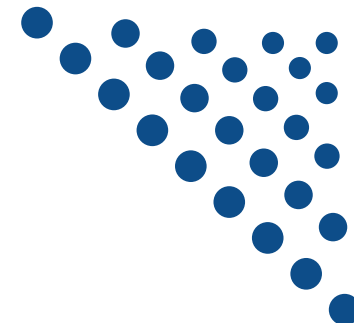


- **What is Globalization?**
- **Pros and Cons**
- **Policies**
- **Effects of the Pandemic**
- **Globalization's Future?**

What Globalizations Is

- **Growth over time of many interactions between countries**
 - Trade
 - Global Value Chains
 - Foreign Direct Investment
 - Financial Flows
 - Migration
 - International Travel

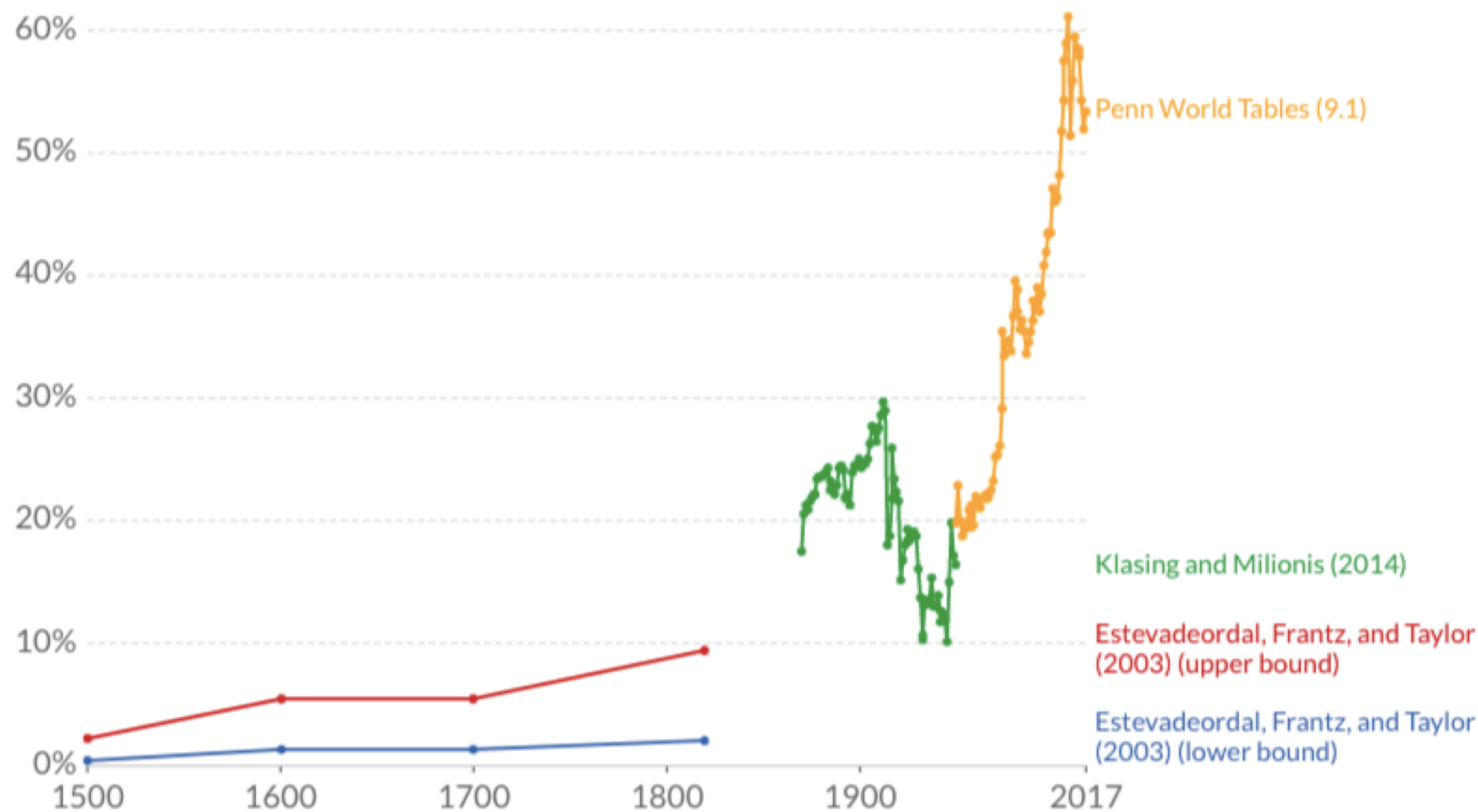




Trade

Globalization over 5 centuries

Shown is the "trade openness index". This index is defined as the sum of world exports and imports, divided by world GDP. Each series corresponds to a different source.



Source: Estevadeordal, Frantz, and Taylor (2003), Klasing and Milionis (2014), Feenstra et al. (2015) Penn World Tables 9.1

CC BY

Value of exported goods as share of GDP

Estimates correspond to merchandise export-to-GDP ratios.

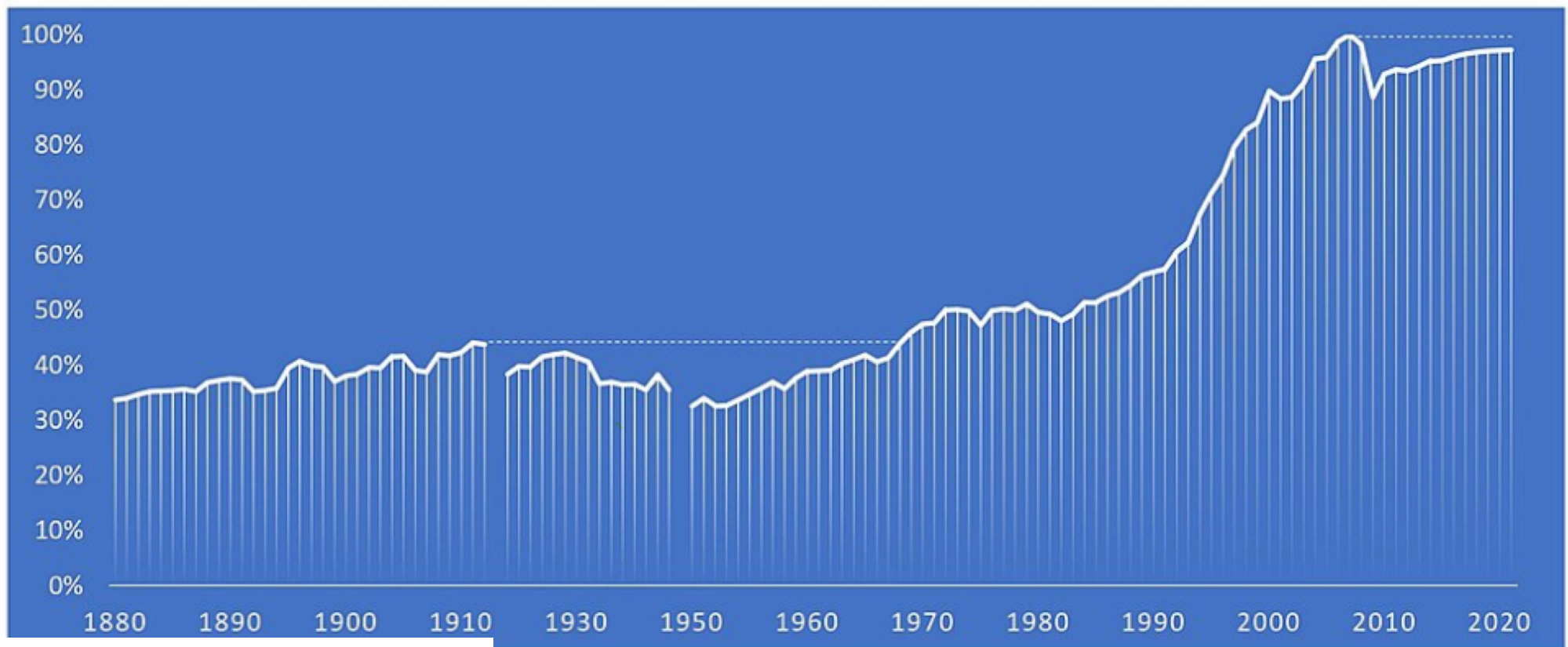


Source: Fouquin and Hugot (CEPII 2016)

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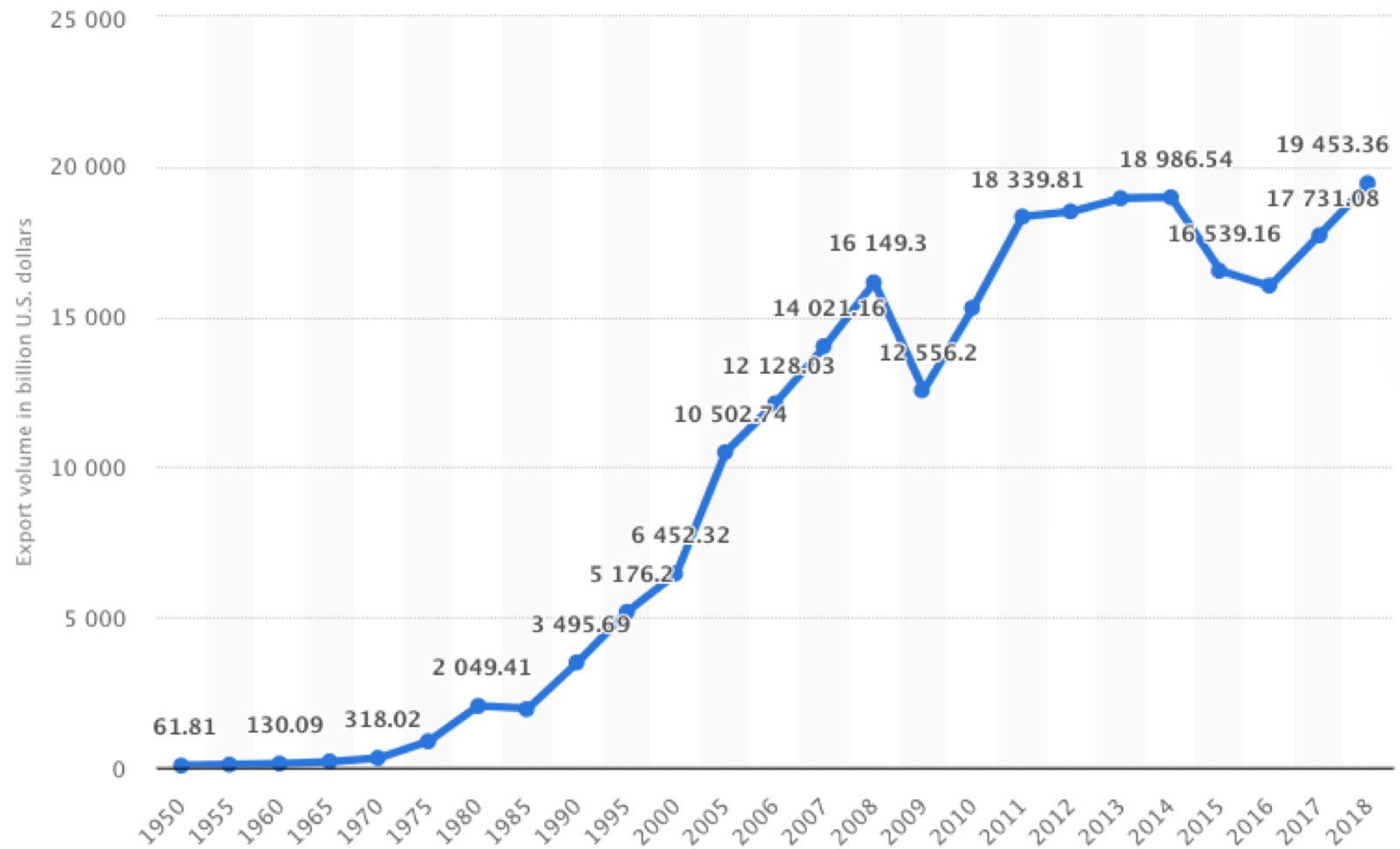
Globalization and Deglobalization 1880-2022

(Openness of the world economy index numbers 2008=100)

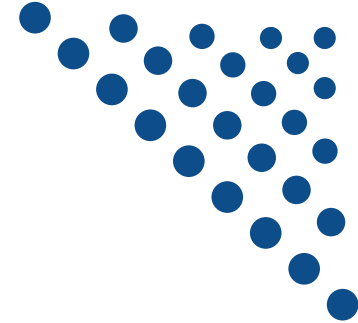


Source: Wikipedia

Export Volume Worldwide in Billions of US Dollars, 1950-2018



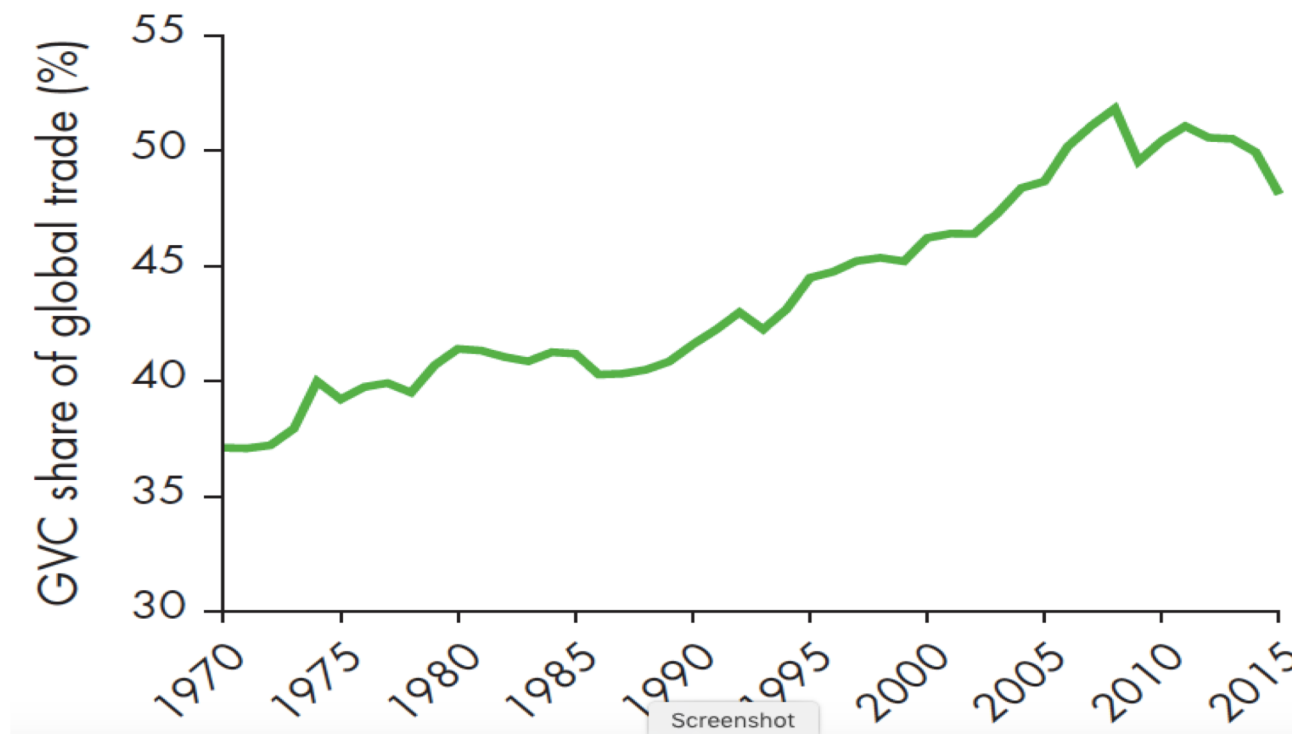
Source: Statista



Global Value Chains

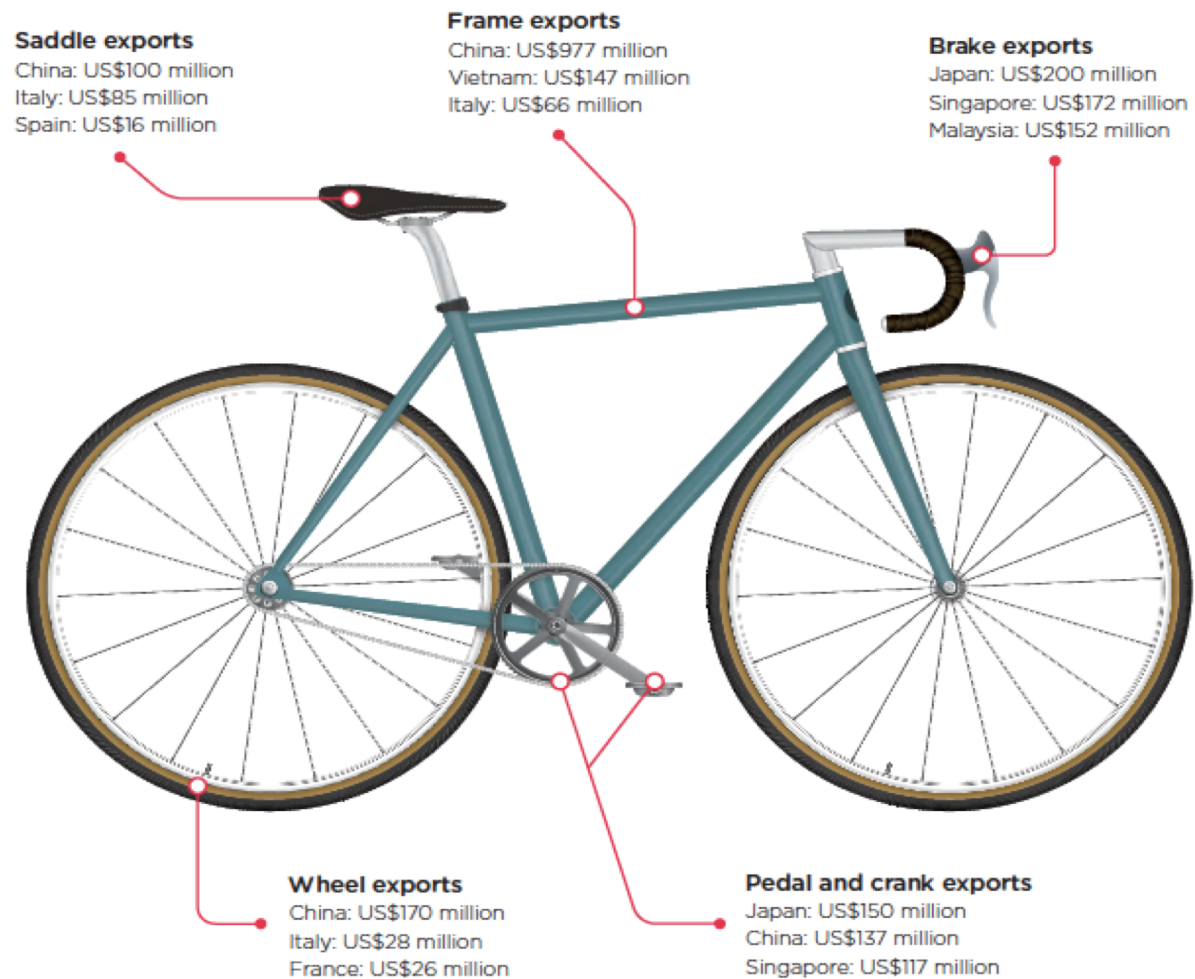
Growth of Global Value Chains, 1970-2015

Figure 1.2 GVC trade grew rapidly in the 1990s but stagnated after the 2008 global financial crisis



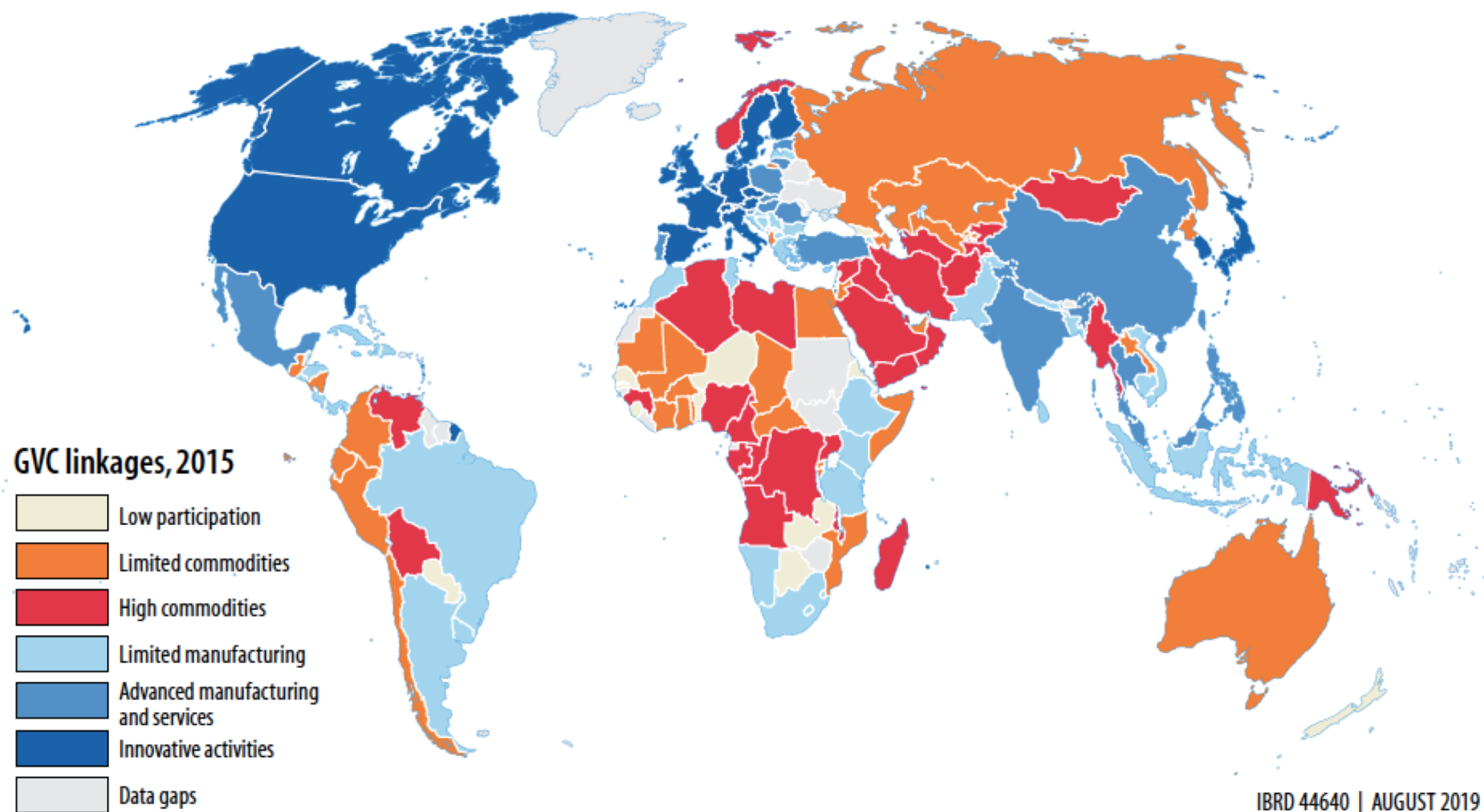
Source: World Development Report 2020

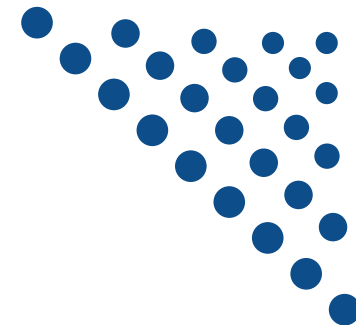
Figure 1.1 Where do bicycles come from?



Source: World Development Report 2020

Map 1.1 All countries participate in GVCs—but not in the same way





Foreign Direct Investment (i.e., multinational companies)

FDI inflows and the underlying trend, 1990-2018
(Indexed, 2010 = 100)

FDI underlying trend,
average annual growth rate

1990s: 21%

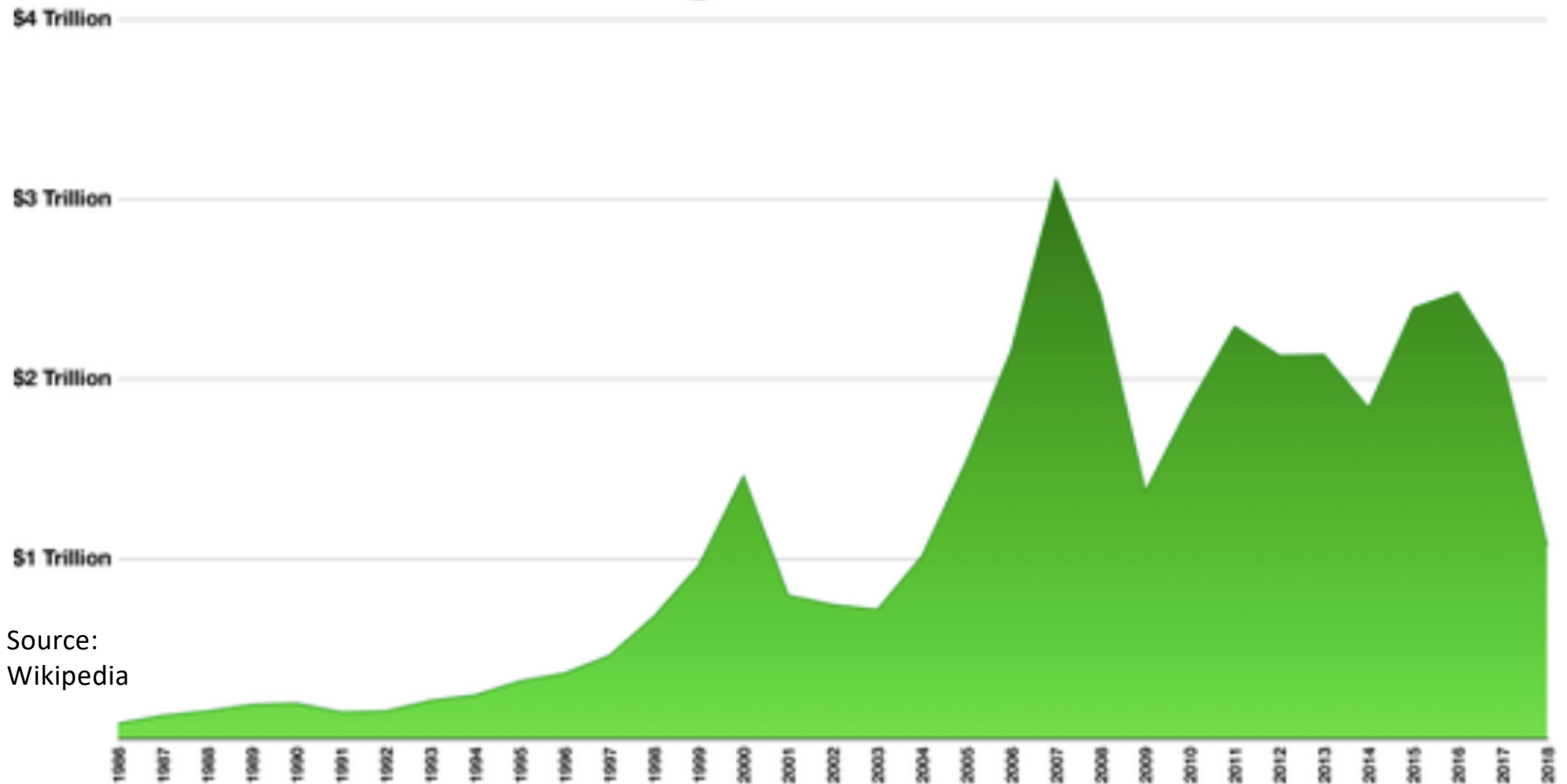
2000–2007: 8%

Post-crisis: 1%

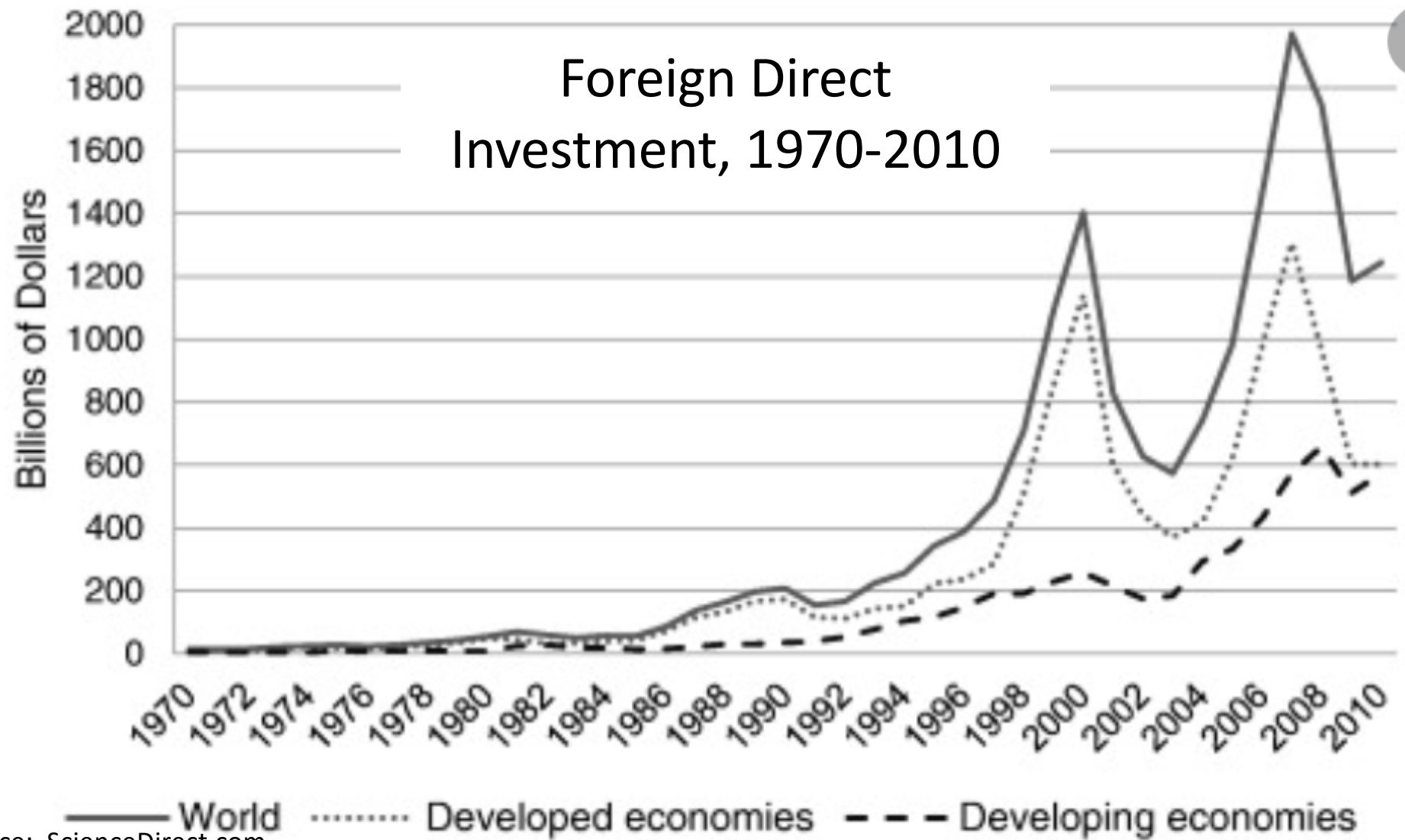


Source: UNCTAD

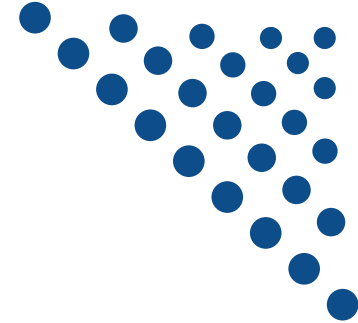
World Foreign Direct Investment, 1986-2016



Foreign Direct Investment, 1970-2010



Source: ScienceDirect.com

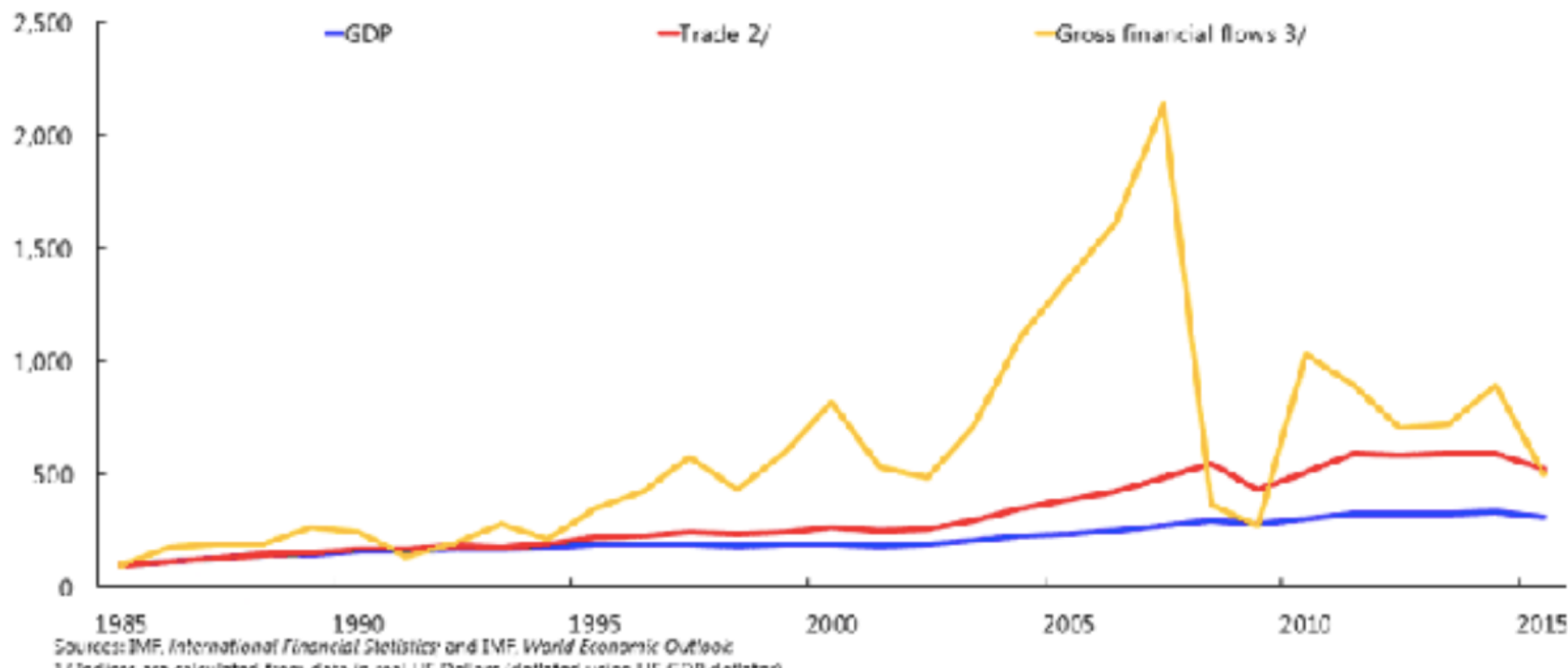


Financial Flows

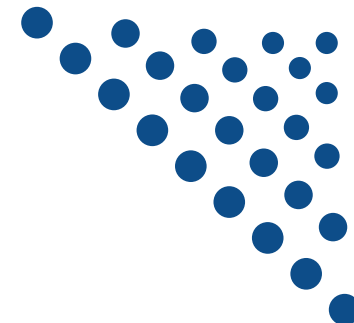
Figure 7: Global capital flows peaked before the GFC

Evolution of global GDP, trade in goods and services, and financial flows

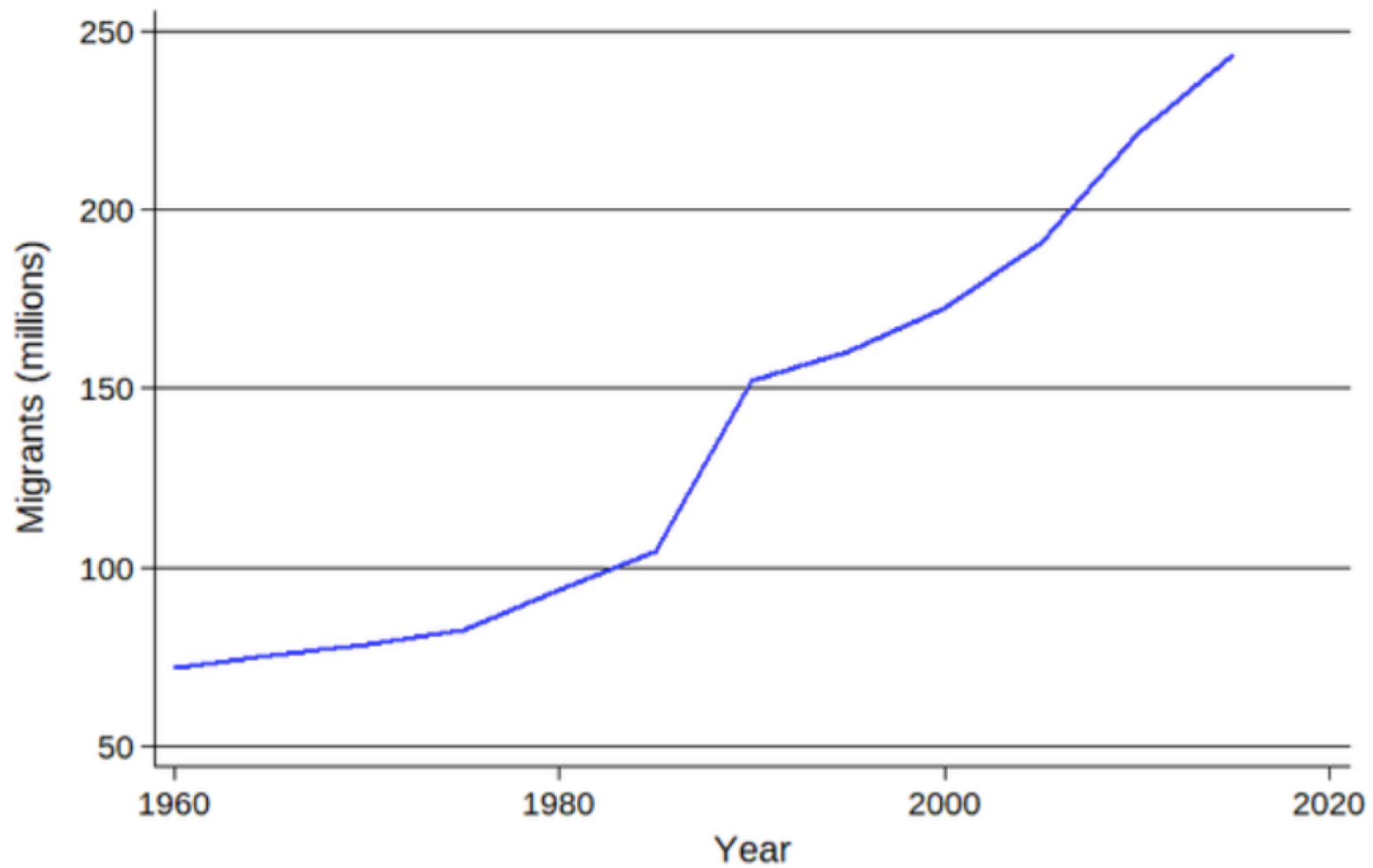
(indices; 1985=100) 1/



Source: Obstfeld 2017



Migration



Source:
Wikipedia

The number of migrants in the world 1960–2015.^[8]



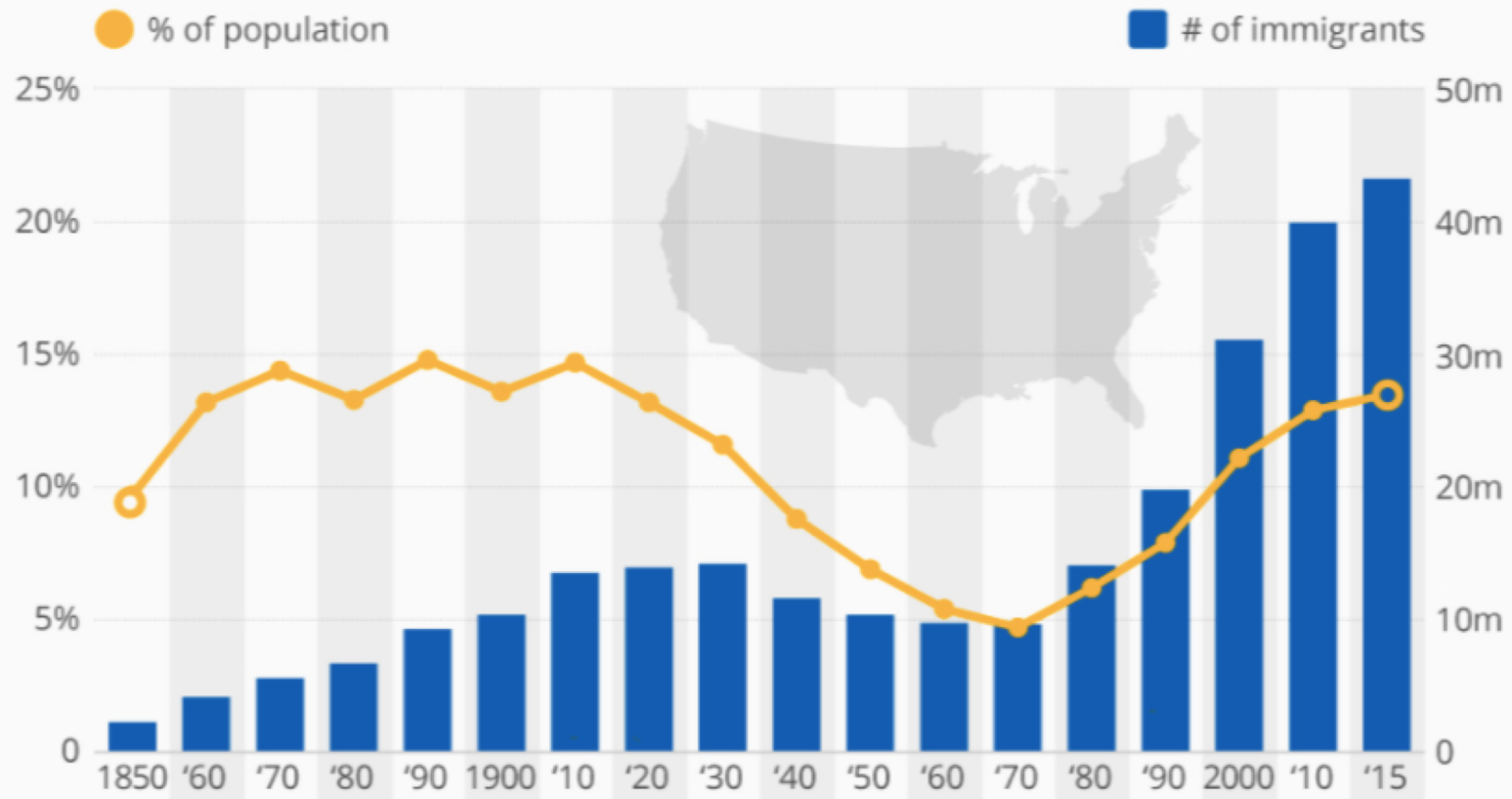
International migrants, 1970–2015^[16]

Year	Number of migrants	Migrants as a % of the world's population
1970	84,460,125	2.3%
1975	90,368,010	2.2%
1980	101,983,149	2.3%
1985	113,206,691	2.3%
1990	153,011,473	2.9%
1995	161,316,895	2.8%
2000	173,588,441	2.8%
2005	191,615,574	2.9%
2010	220,781,909	3.2%
2015	248,861,296	3.4%
2019	271,642,105	3.5%

Source:
Wikipedia

Level of Migration to America Not Unprecedented

Foreign-born population in the U.S. 1850–2015 (total & percentage share)



The term foreign-born refers to people residing in the United States who were not U.S. citizens at birth.

Source: Migration Policy Institute

StatistaCharts

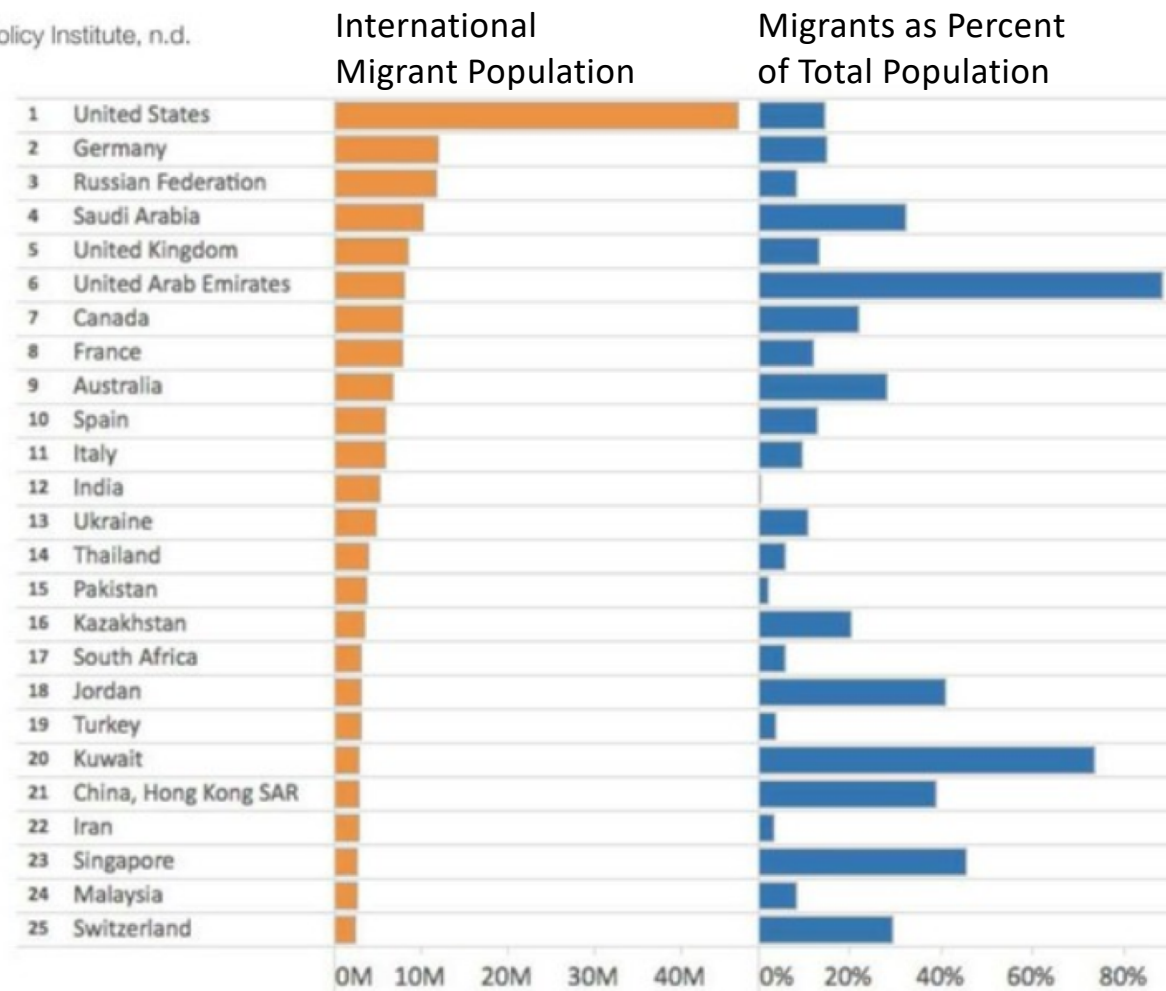
statista

Source:
Statista

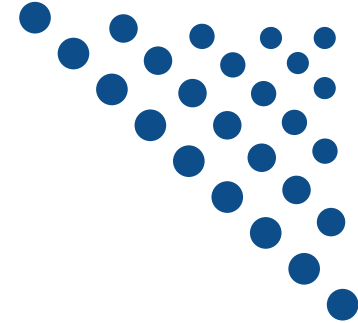
Figure 8: Top 25 Destination Countries for International Migration, 2015

Note: M = million

Source: Migration Policy Institute, n.d.

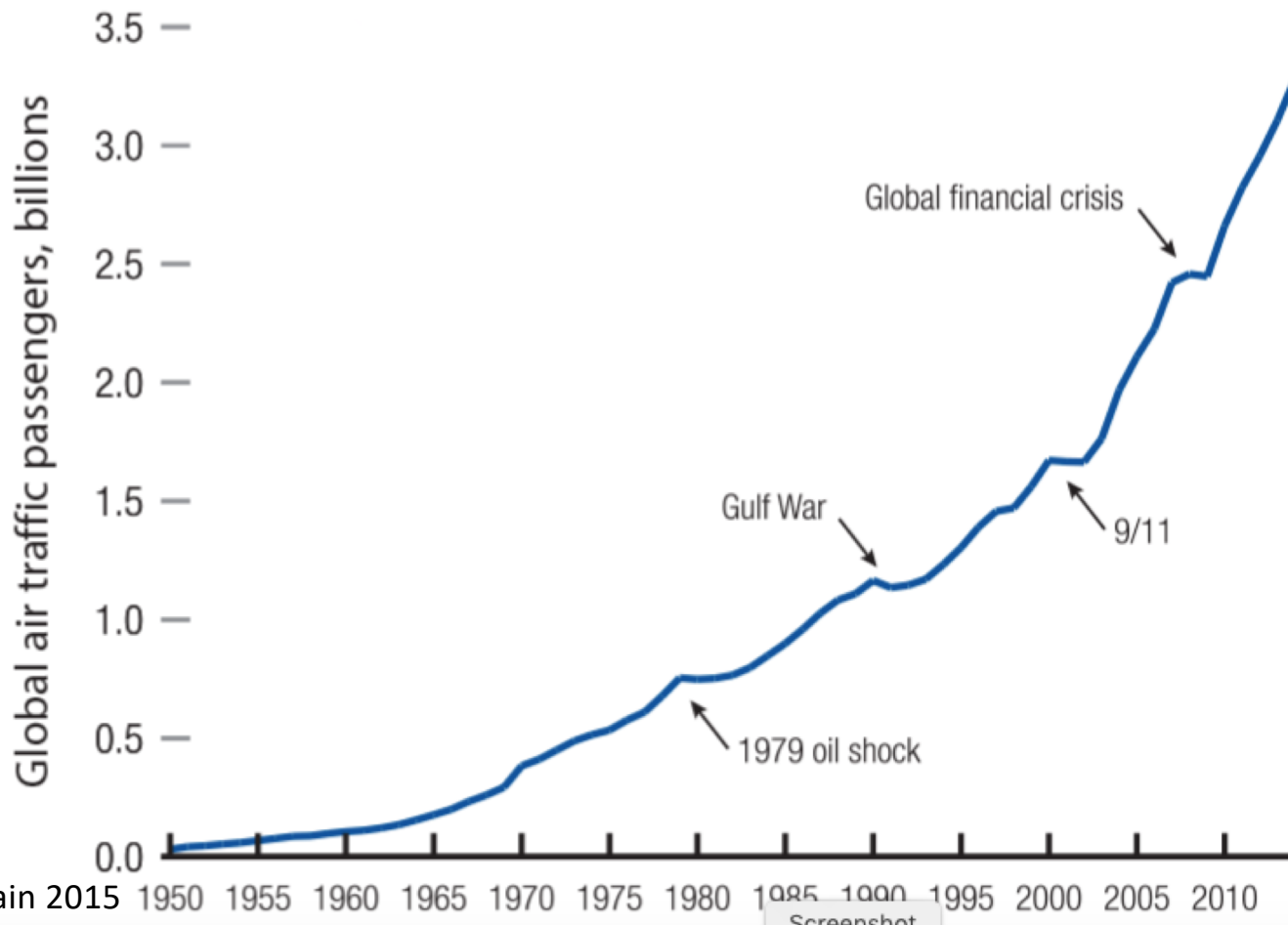


Source: Gray 2017



International Travel

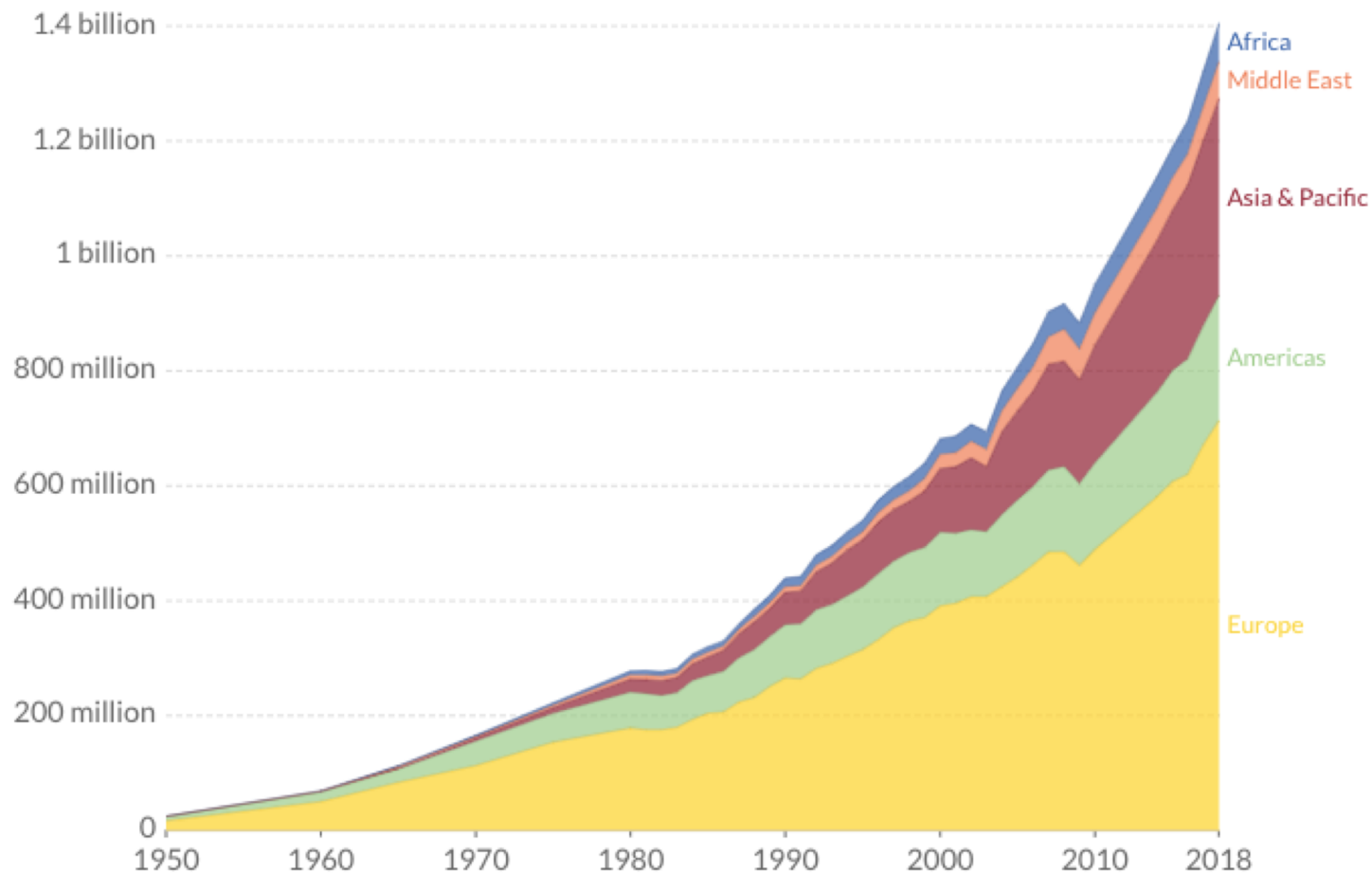
Figure 1: Global air passenger traffic trend, 1950-2014
(IATA Forecast for 2014)



Source: Oxley and Jain 2015

International Tourist Arrivals by World Region

Our World
in Data

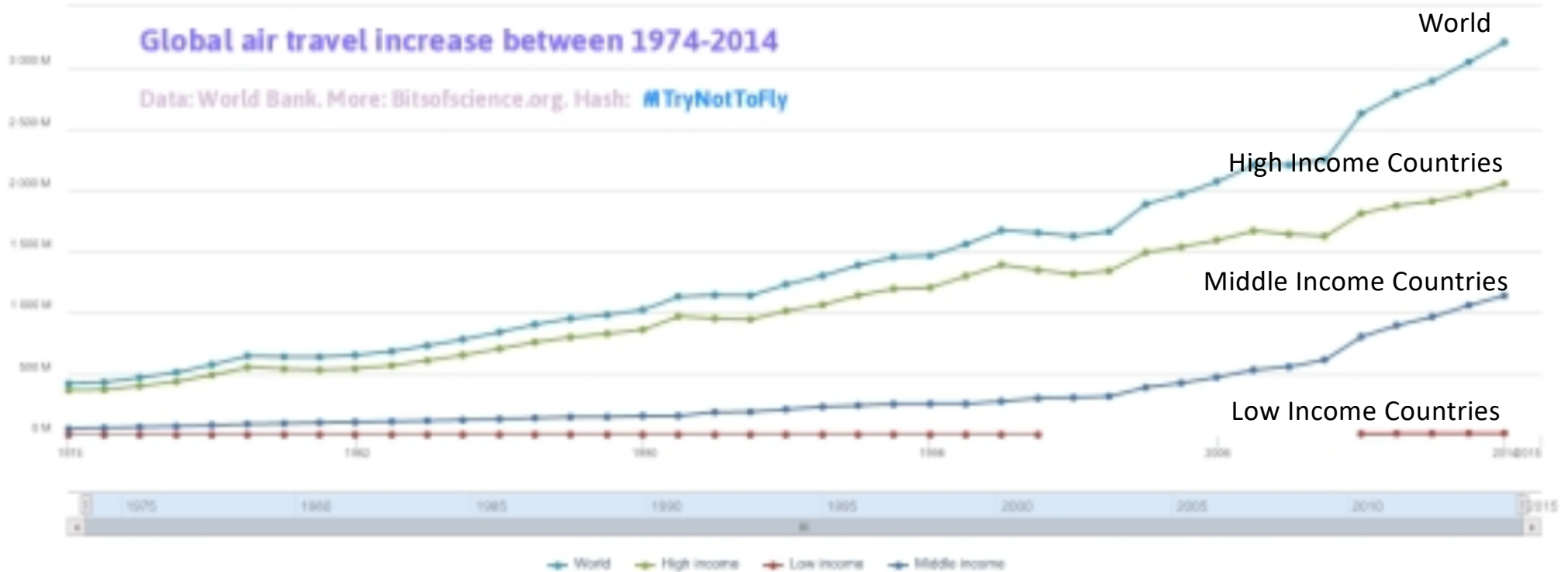


Source: United Nations World Tourism Organization - World Tourism Barometer (2019)

CC BY

Global air travel increase between 1974-2014

Data: World Bank. More: Bitsofscience.org. Hash: [TryNotToFly](#)



Series : Air transport, passengers carried

Source : World Development Indicators

Created on: 02/24/2016

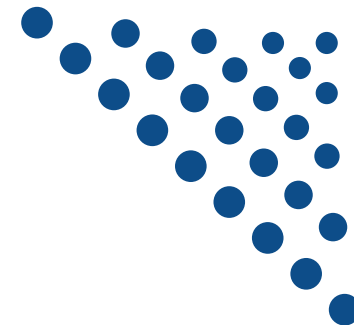
Source: Schuttenhelm 2016

Average Round-Trip U.S. Domestic Airfares Inflation-Adjusted 2011 Dollars, 1979 to 2011



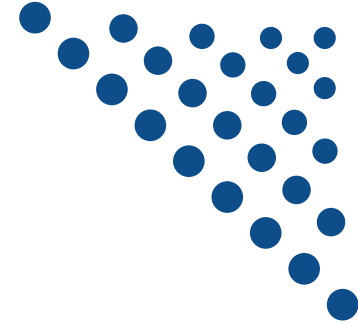
Source: Schuttenhelm 2016

Pros and Cons of Globalization



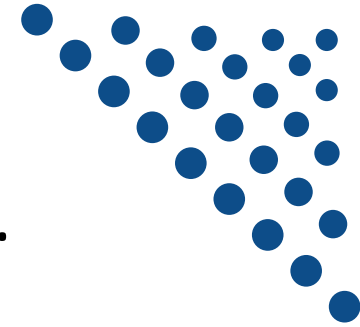
- **Pros and Cons of Globalization**

- Gains from Trade
 - Theory of Comparative Advantage
 - Other Sources of Gain from Trade
- Costs of Trade



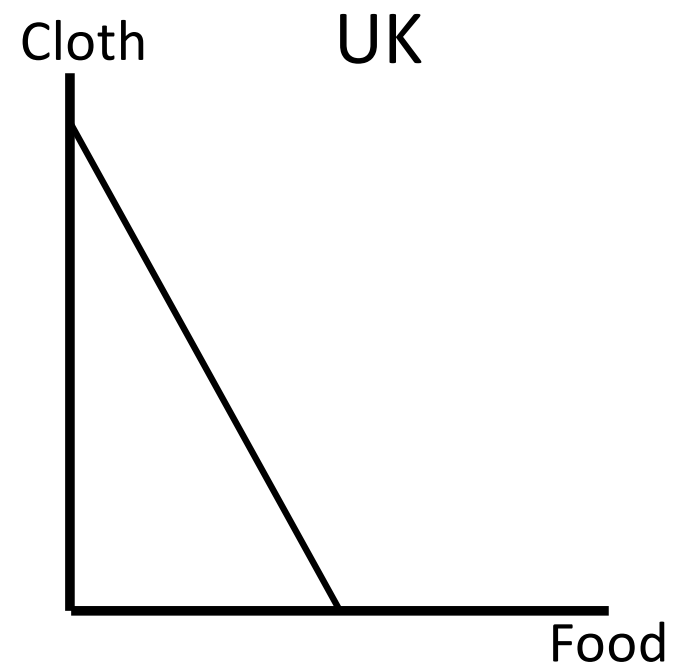
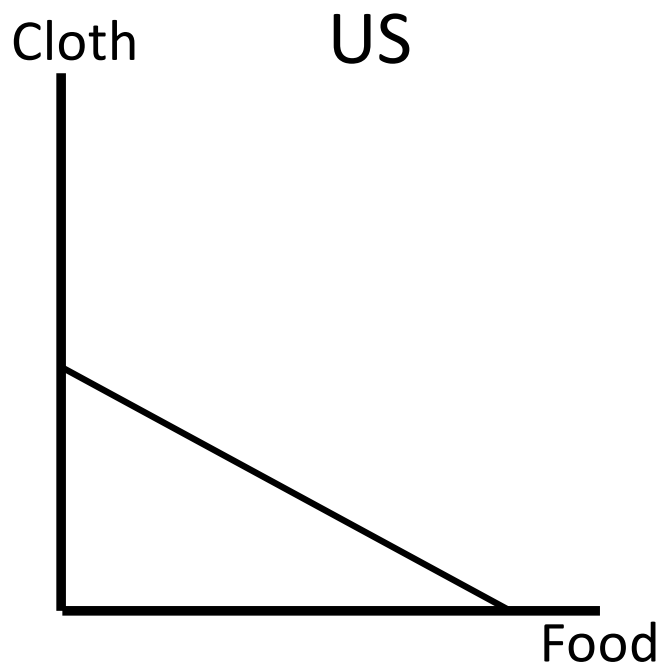
Gains from Trade

Theory of Comparative Advantage



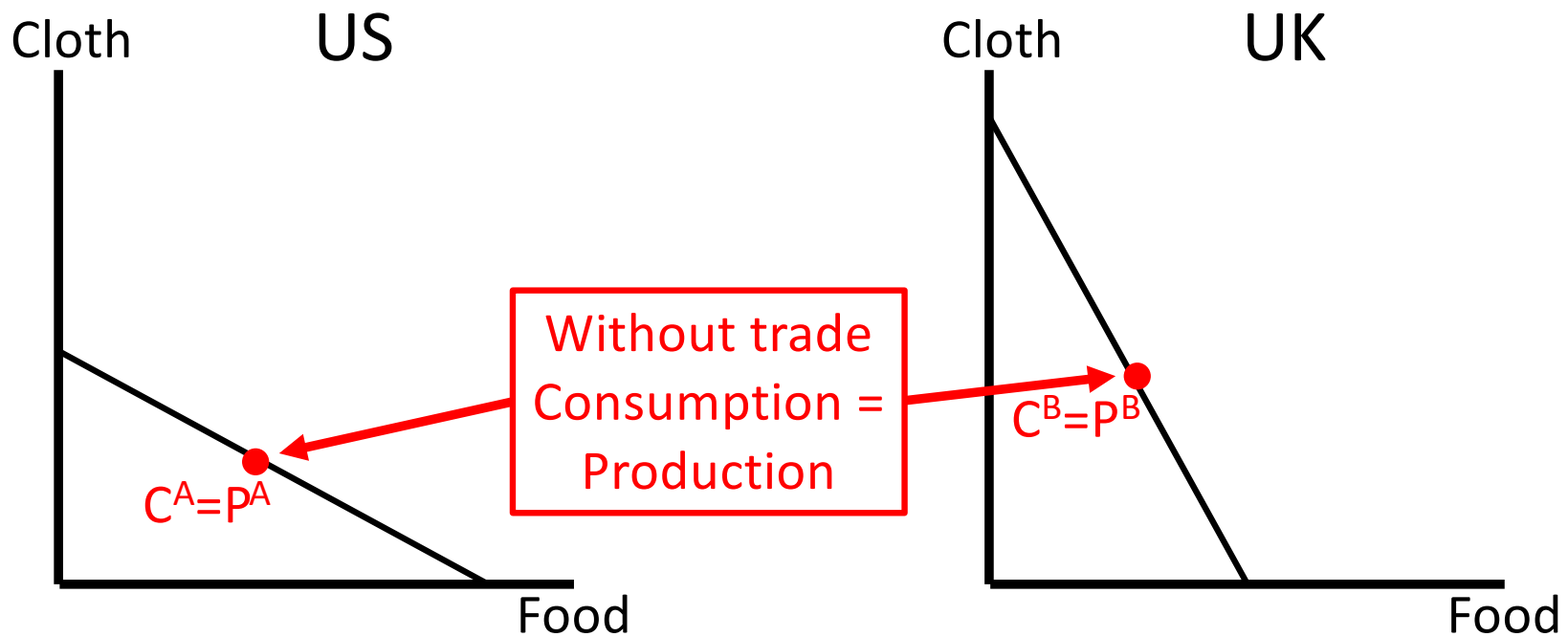
Comparative Advantage

If US & UK differ in what they can produce...



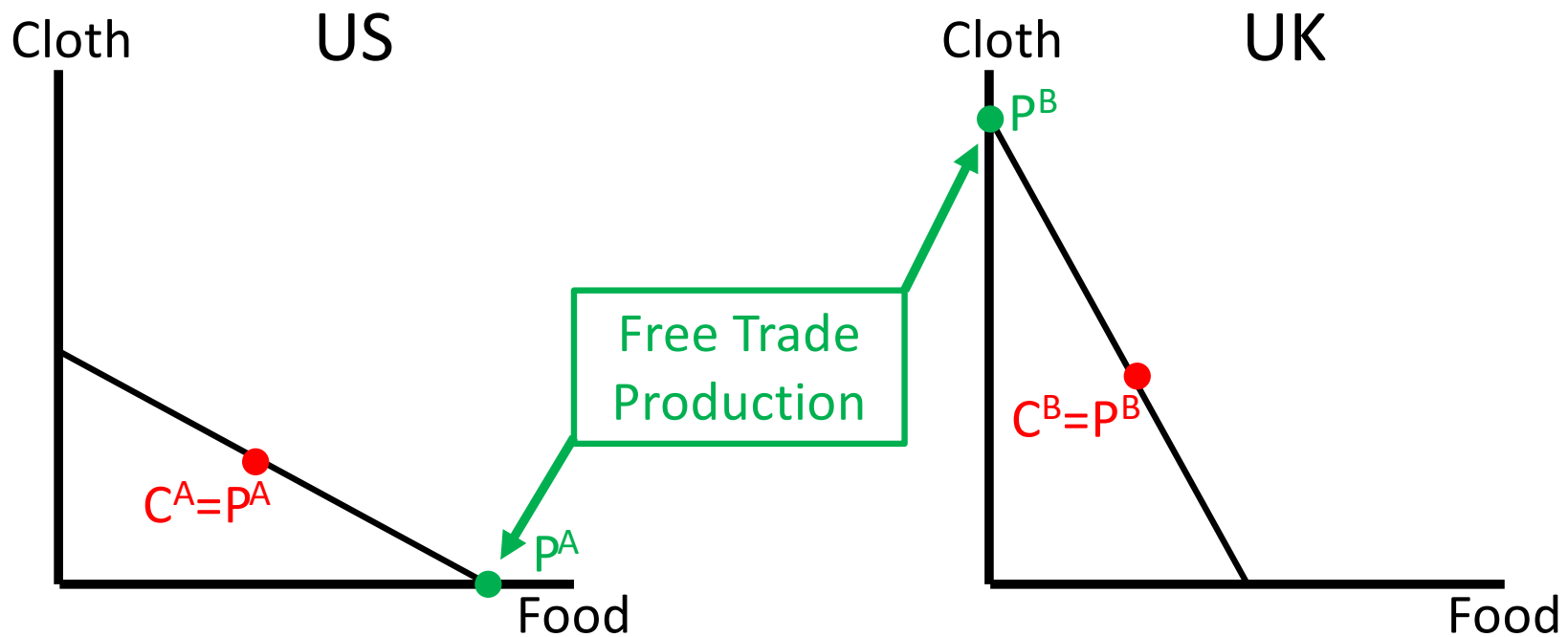
Comparative Advantage

... Without trade, their consumption will also differ...



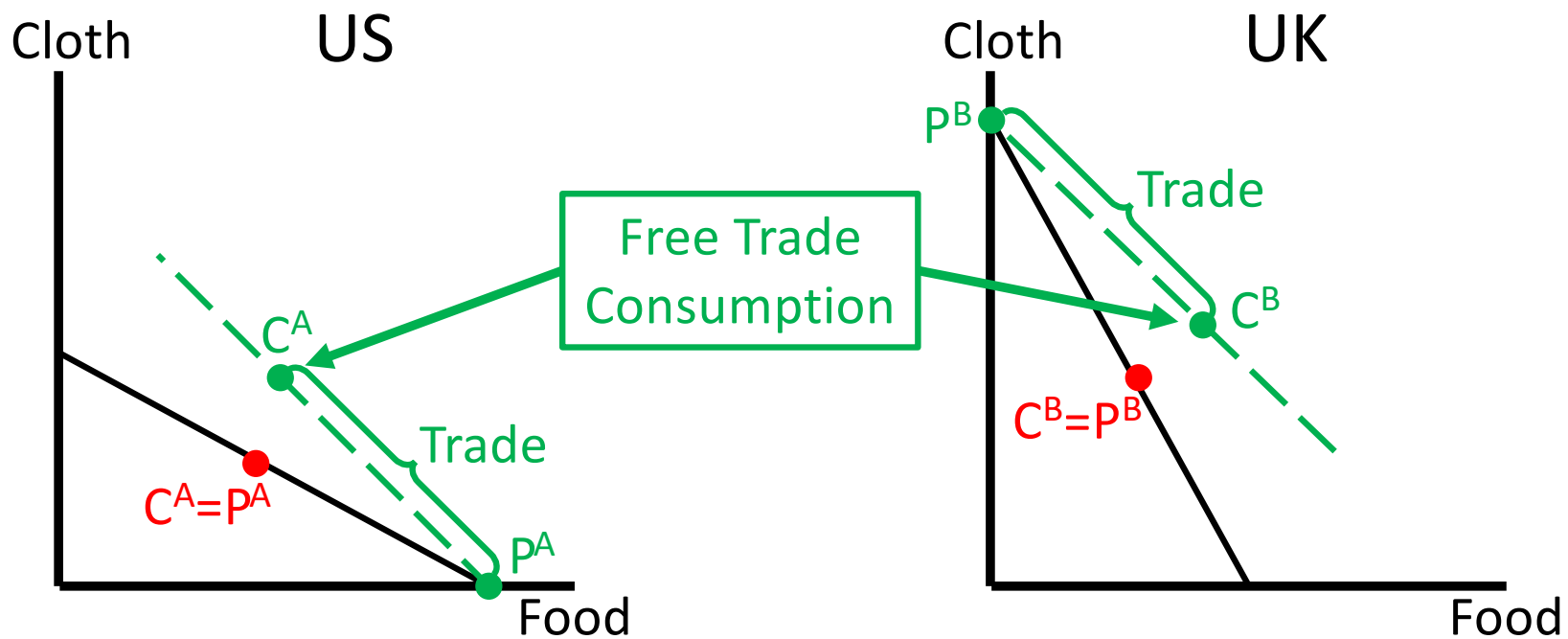
Comparative Advantage

... With free trade, they specialize in what they do best...



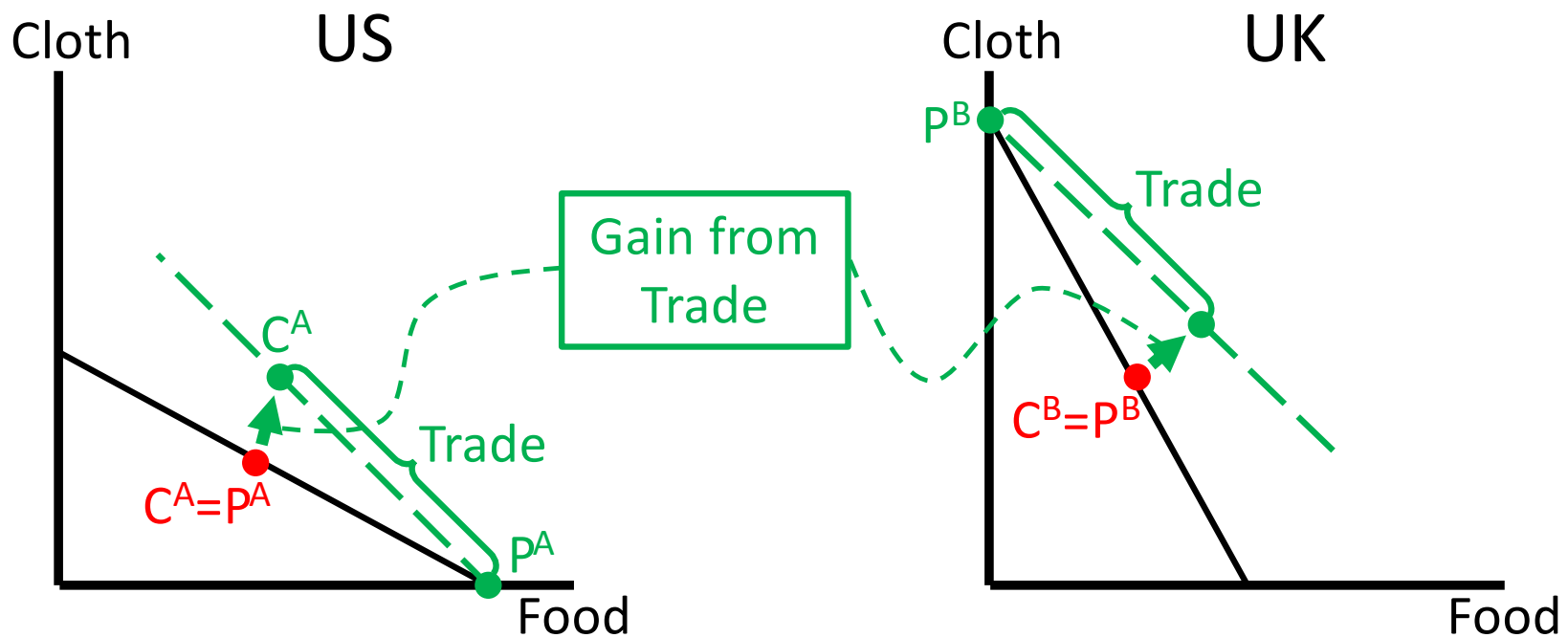
Comparative Advantage

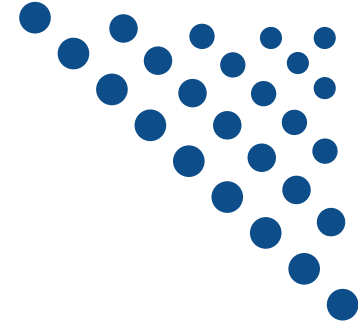
... And can consume more by trading.



Comparative Advantage

Thus countries both Gain from Trade

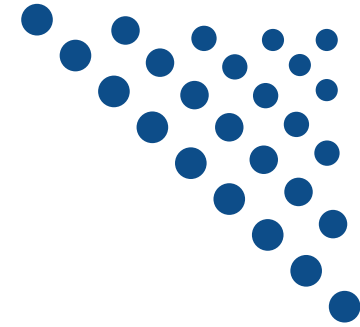




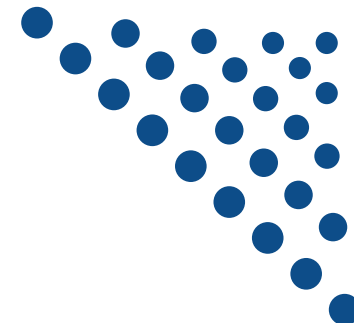
Gains from Trade

Other Sources of Gain from Trade

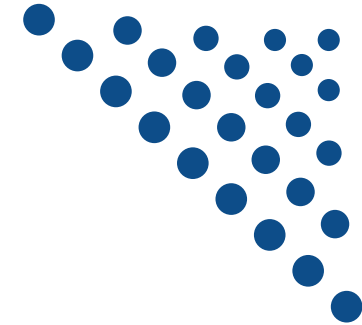
Other sources of Gain from Trade



- **Productivity** (most productive firms expand and export)
- **Returns to scale** (small countries can support larger firms)
- **Competition** (monopolies in small countries lose market power)
- **Variety** (buyers can access more choices)
- **Supply chains** (firms source parts from cheapest sources)
- **Technology** (producers access foreign technologies)



Costs of Trade



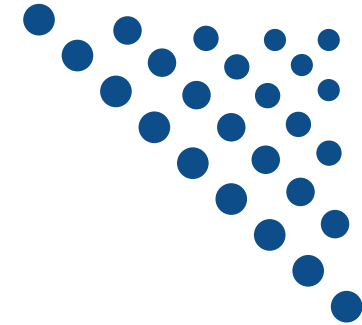
But there are Costs

- **Economic:**

- When trade expands (or contracts)
 - Some firms lose market share or shut down
 - Their workers lose jobs
 - Their communities lose customers
- Vulnerability to foreign recession/inflation

- **Non-economic**

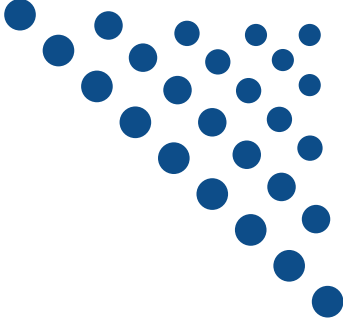
- Dependence on other countries
- Vulnerability to trade disruption
 - Crisis induced (earthquake, flood, disease)
 - Policy induced (sanctions, tariffs, export bans)



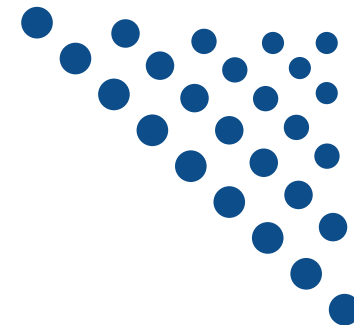
Policies that Affect Globalization

- Policies that Affect Globalization

- That Encourage It
 - Tariff Reductions
 - Trade Agreements
 - Other
- That Discourage It
 - Trump's Tariffs
 - Trade War



Policies that Encourage Globalization



Tariff Reductions

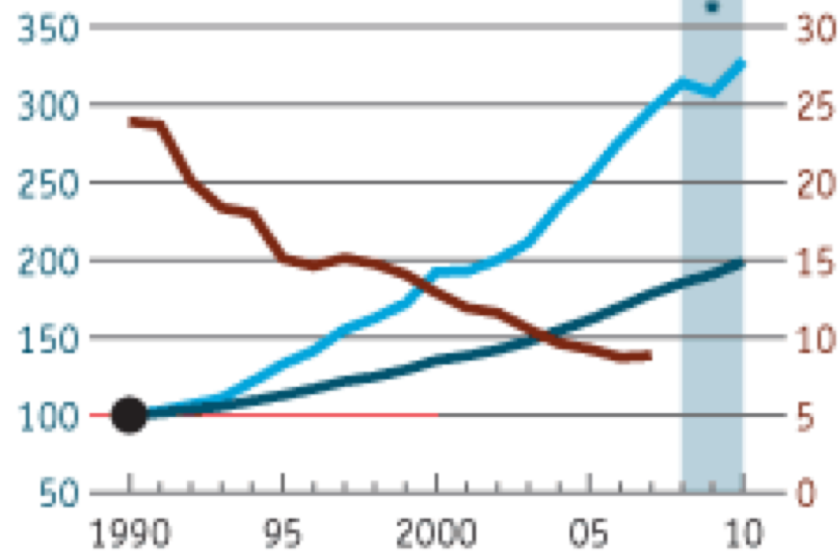
Golden years

Indices, 1990=100:

world trade volume

world GDP

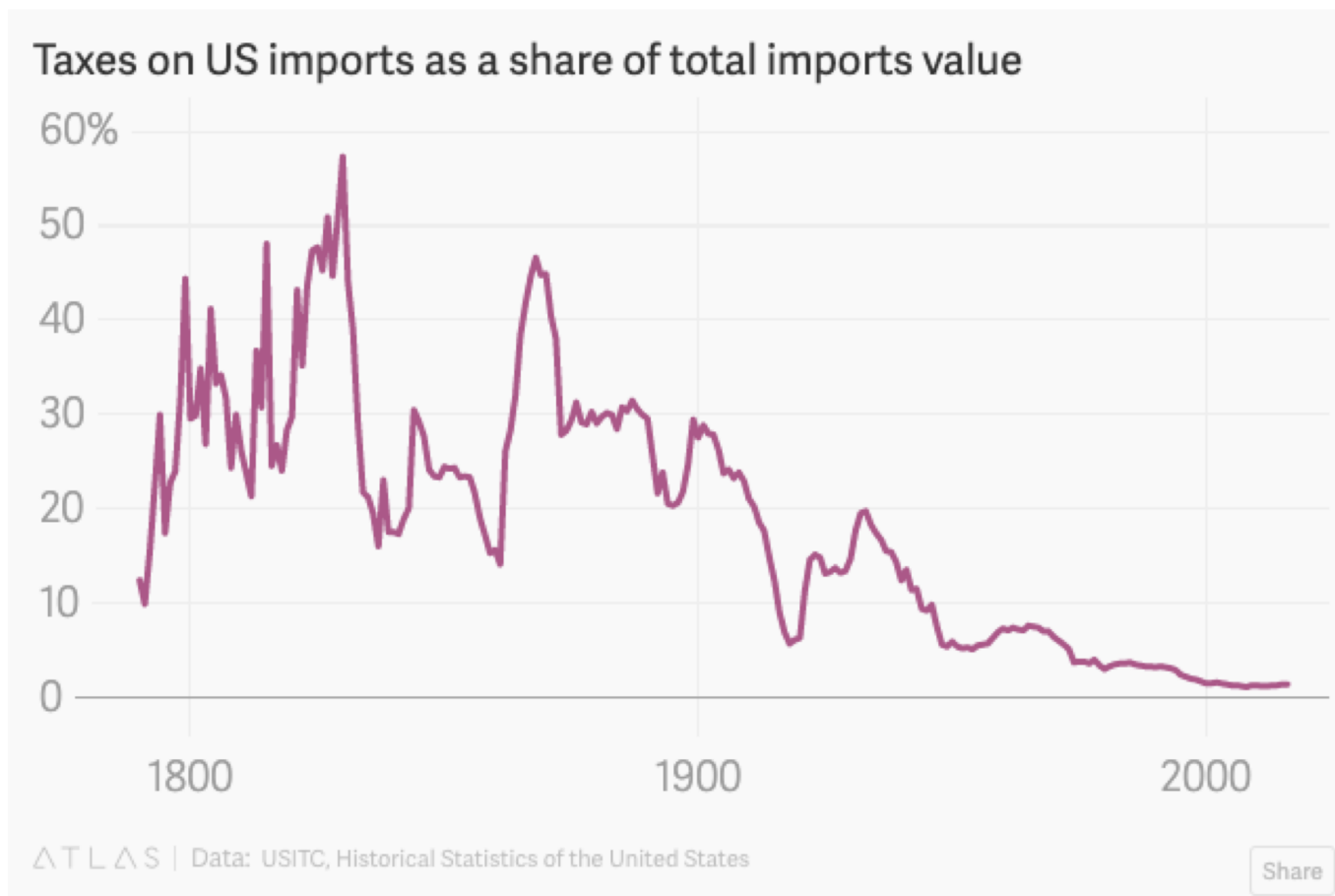
*Average tariff
applied, %*



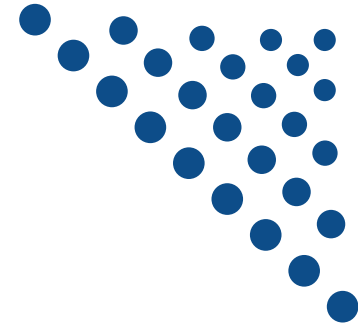
Sources: World Bank; IMF

*Forecast

Source: Economist

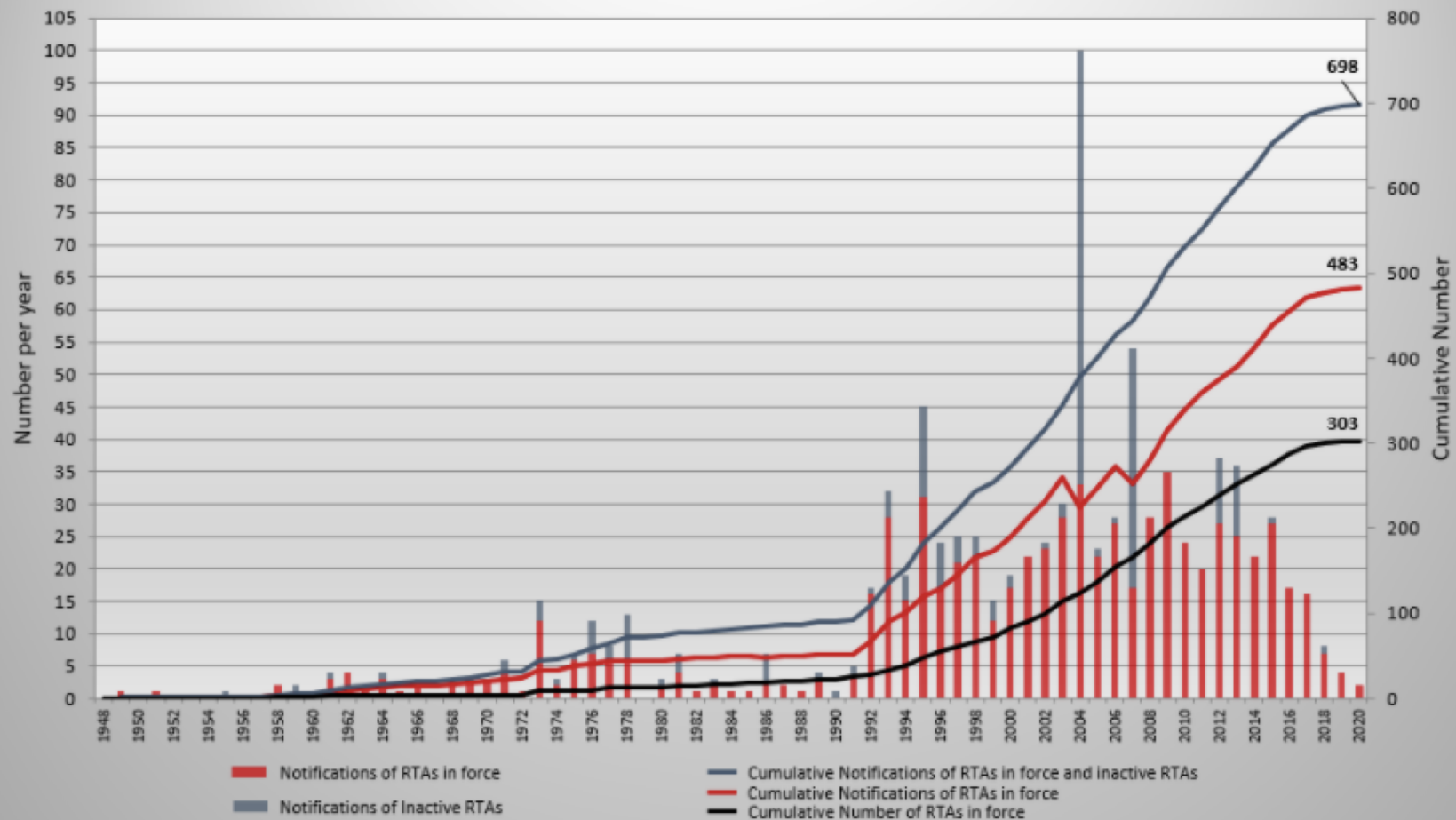


Source: Quartz 2018



Trade Agreements

Evolution of Regional Trade Agreements in the world, 1948-2020



Note: Notifications of RTAs: goods, services & accessions to an RTA are counted separately. The cumulative lines show the number of RTAs/notifications that were in force for a given year. The notifications of RTAs in force are shown by year of entry into force and the notifications of inactive RTAs are shown by inactive year.
Source: RTA Section, WTO Secretariat, January 2020.

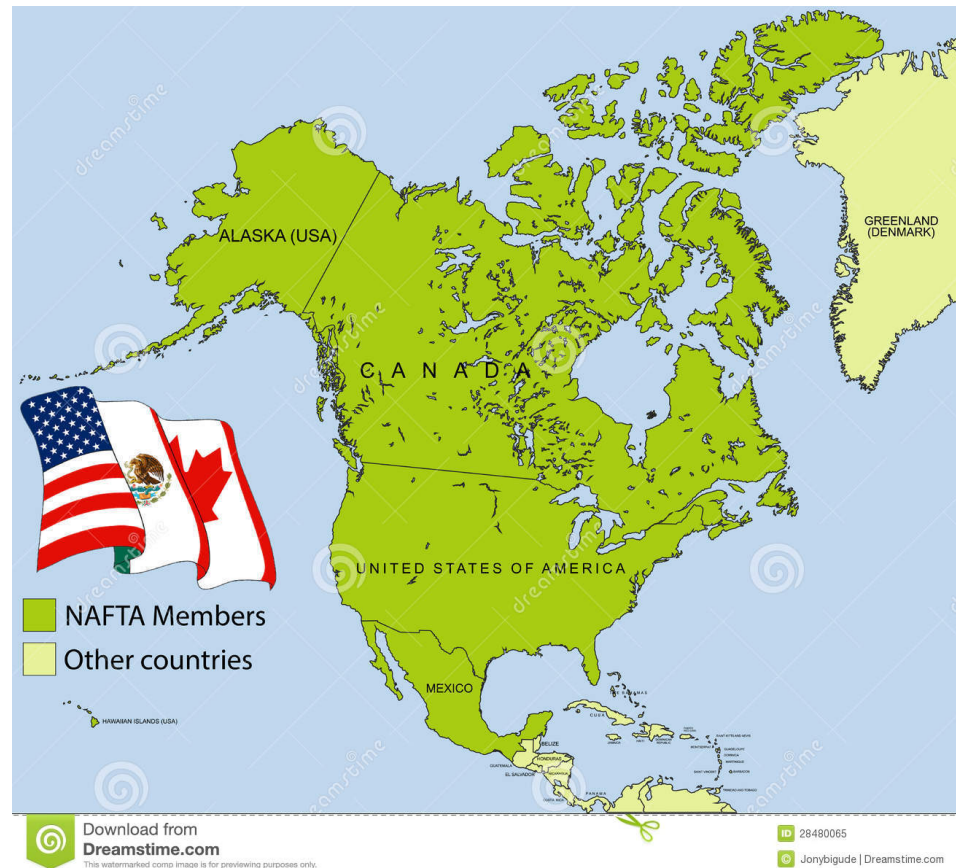
Source:
WTO

European Union

Source: Europa.eu



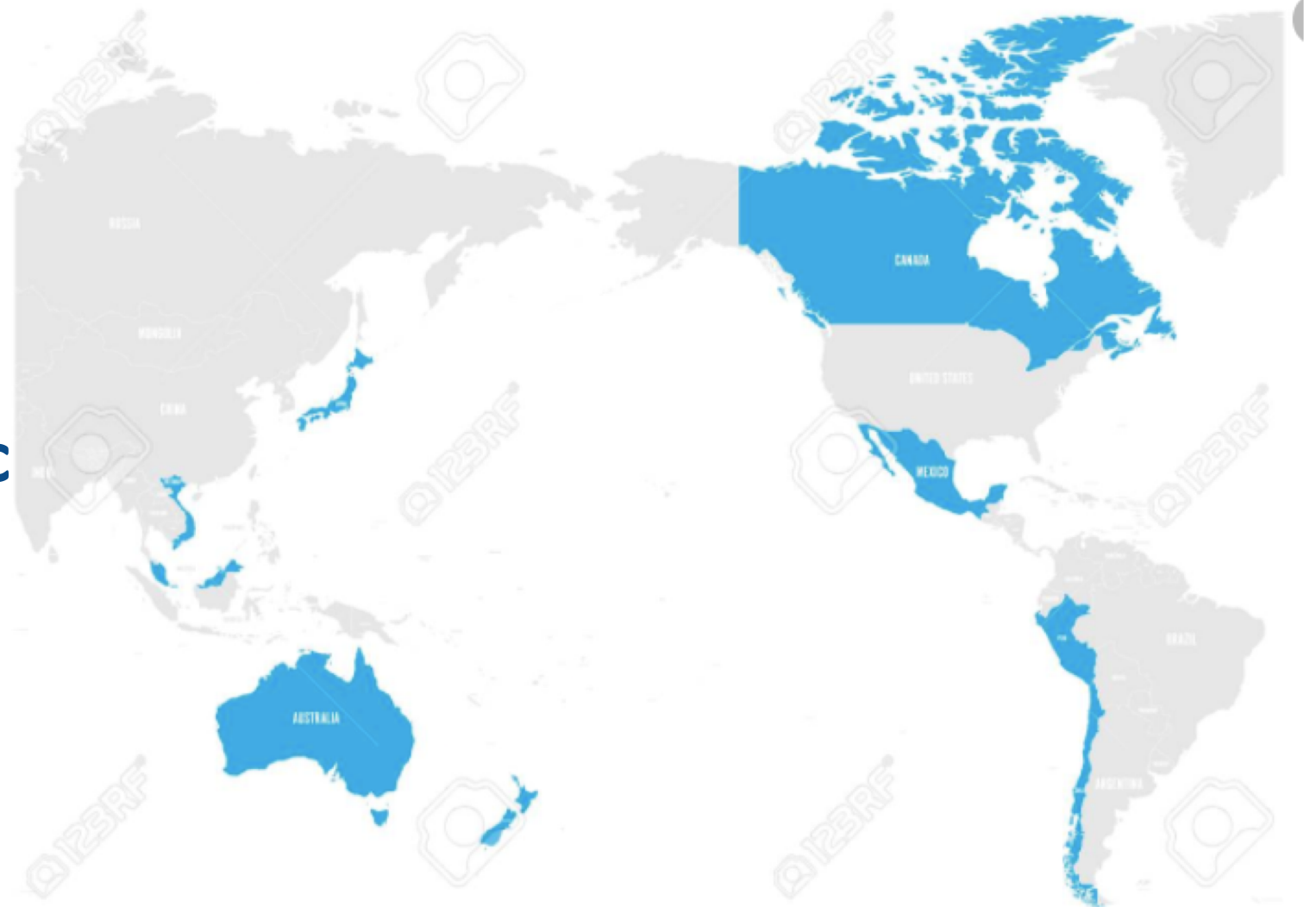
NAFTA (now USMCA)



MERCOSUR



CPTPP
=
Trans-Pacific
Partnership
minus US

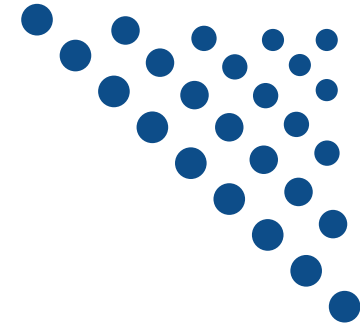


RCEP
=
Regional
Comprehensive
Economic
Partnership

**(Pending, hope
to sign by end
of 2020)**



Other Policies to Encourage Globalization



- **IMF/World Bank**

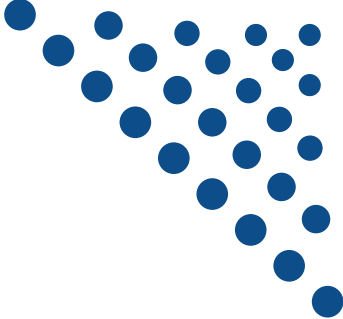
- Policy advice to open markets (the "Washington Consensus")
- Loans to countries conditional on
 - Reducing trade barriers
 - Permitting capital flows

- **GATT/WTO (World Trade Organization)**

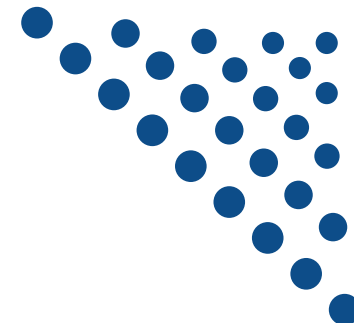
- Negotiate reciprocal trade liberalization
- Settlement of trade disputes (usually about interfering with trade)

- **Bilateral Investment Treaties**

- Better treatment of multinational corporations

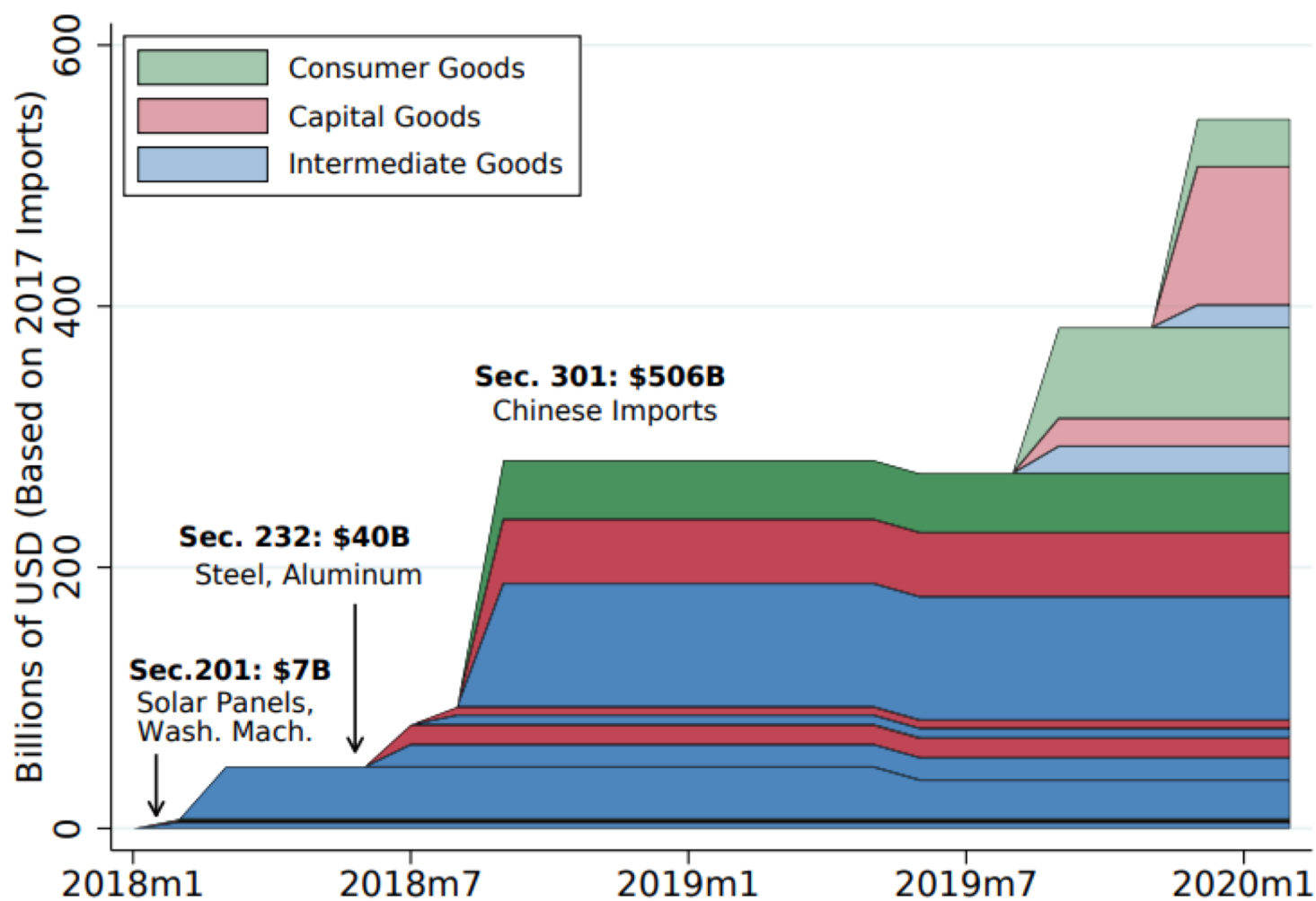


Policies that Discourage Globalization



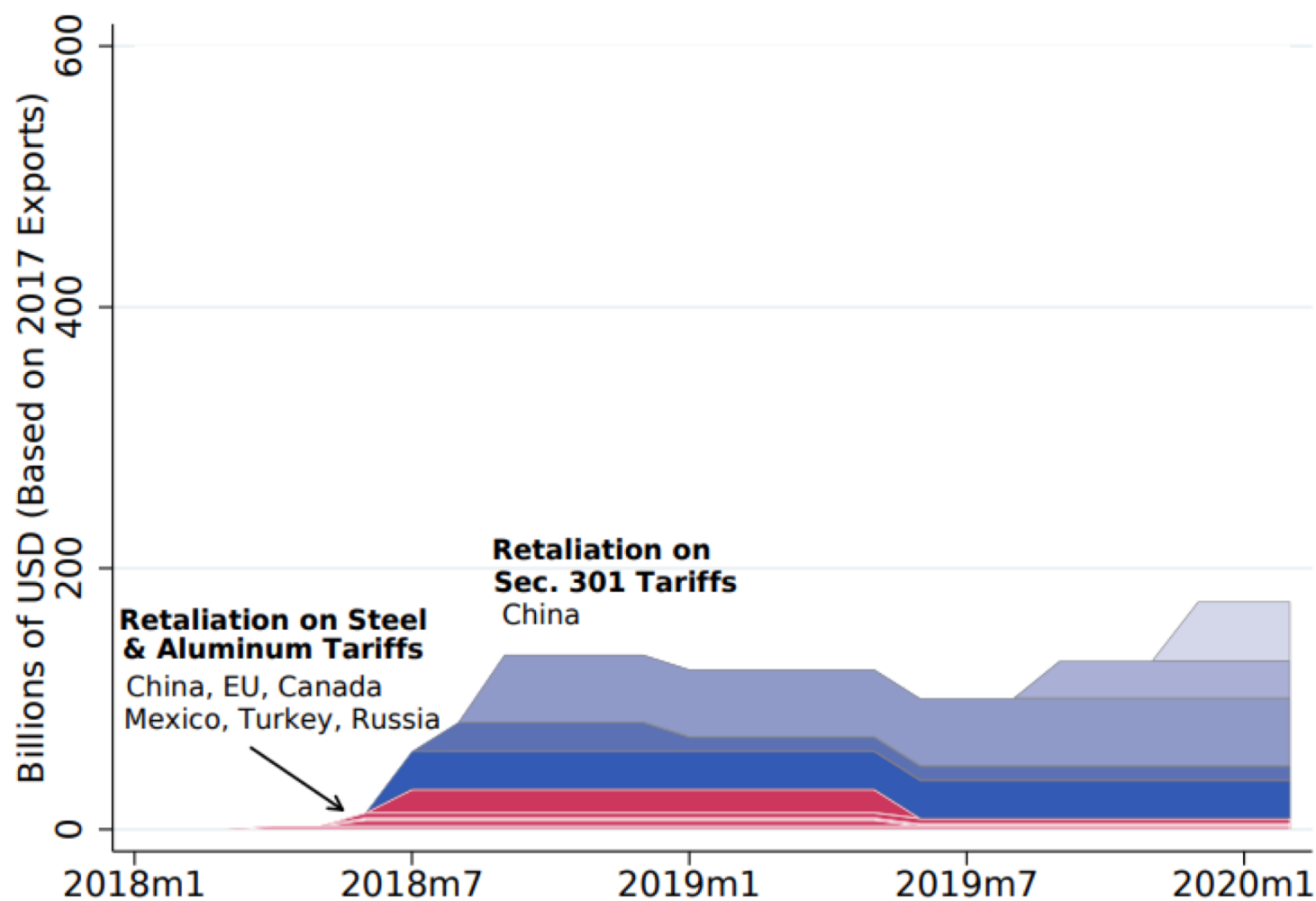
Trump's Tariffs

Figure B1: Composition of New U.S. Import Tariffs: 2018-2019

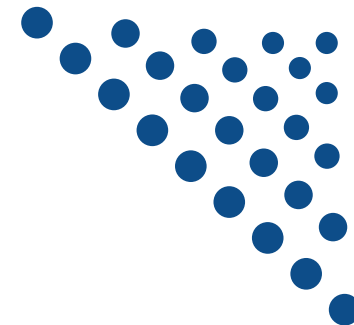


Source:
Flaan &
Pierce
2020

Figure 3: Timeline of Retaliatory Tariffs on U.S. Exports: 2018-2019



Source:
Flaan &
Pierce
2020



Trade War

US-China tariff war



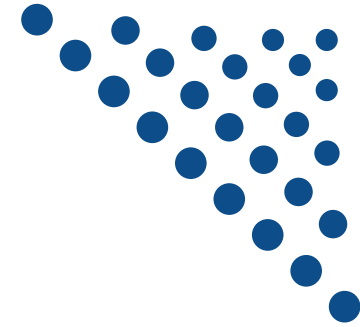
SOURCE: PIIE, USTR, International trade Centre, China's finance ministry



Source:
CNBC.com

The first trade salvo was fired by the U.S. in early 2018, but the bilateral trade war between the U.S. and China really kicked into a higher gear in July 2018.

Other Policies to Discourage Globalization



- **Undermine the WTO**

- Trump blocks appointments at WTO, disabling the Dispute Settlement Body

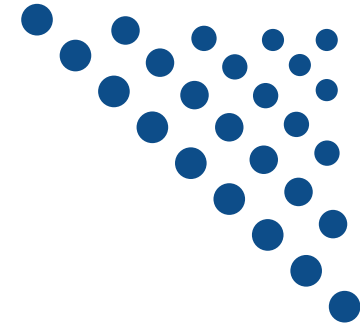
- **Export bans**

- To keep food cheap at home
- To keep medical supplies at home

- **Immigration restrictions**

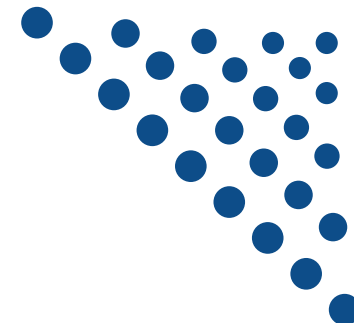
- Trump blocks travelers from target countries
- US and others block refugees

Effects of the Pandemic on Globalization



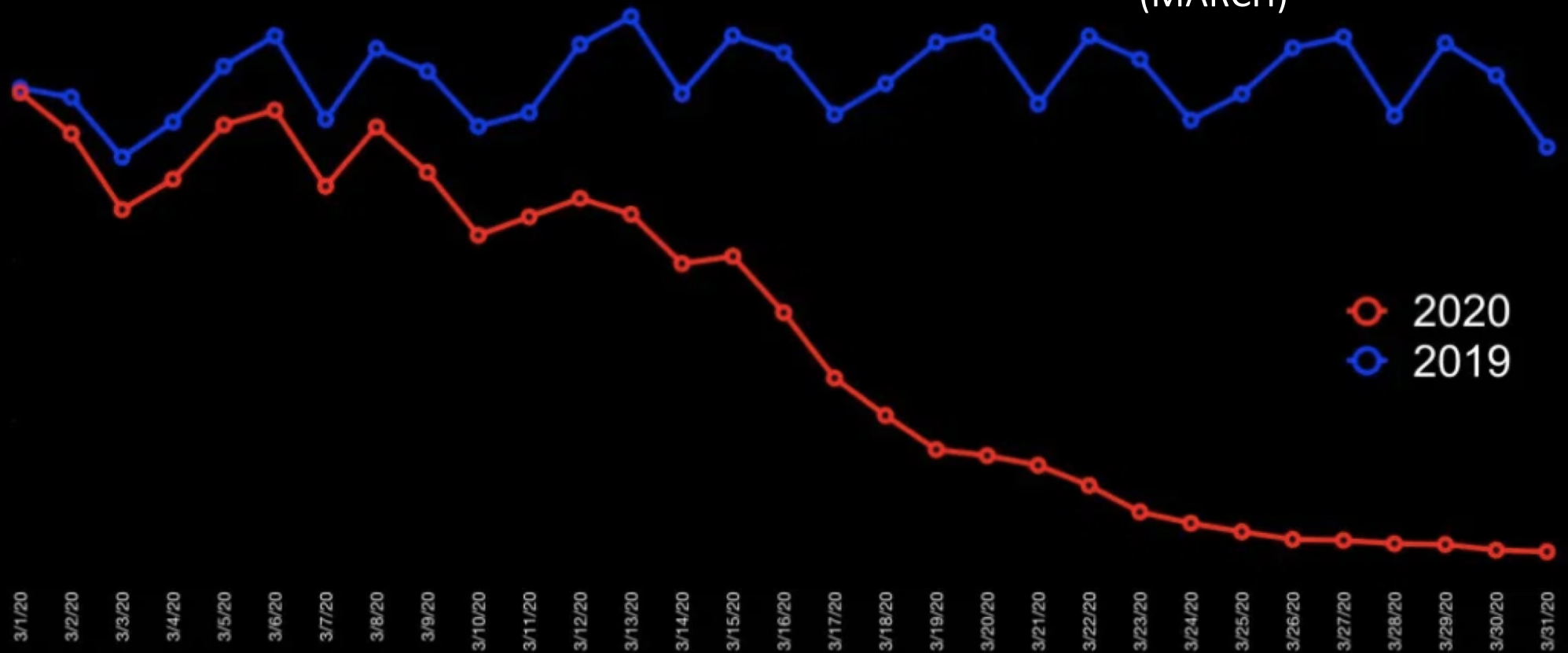
• Effects of the Pandemic on Economies

- Travel halted
- Stock markets fall
- Factories shut down
- Supply chains interrupted
- Trade plummets
- Unemployment
- Reduced GDP
- Panic buying and shortages



Travel

TSA checkpoint travel numbers for 2020 and 2019 (MARCH)

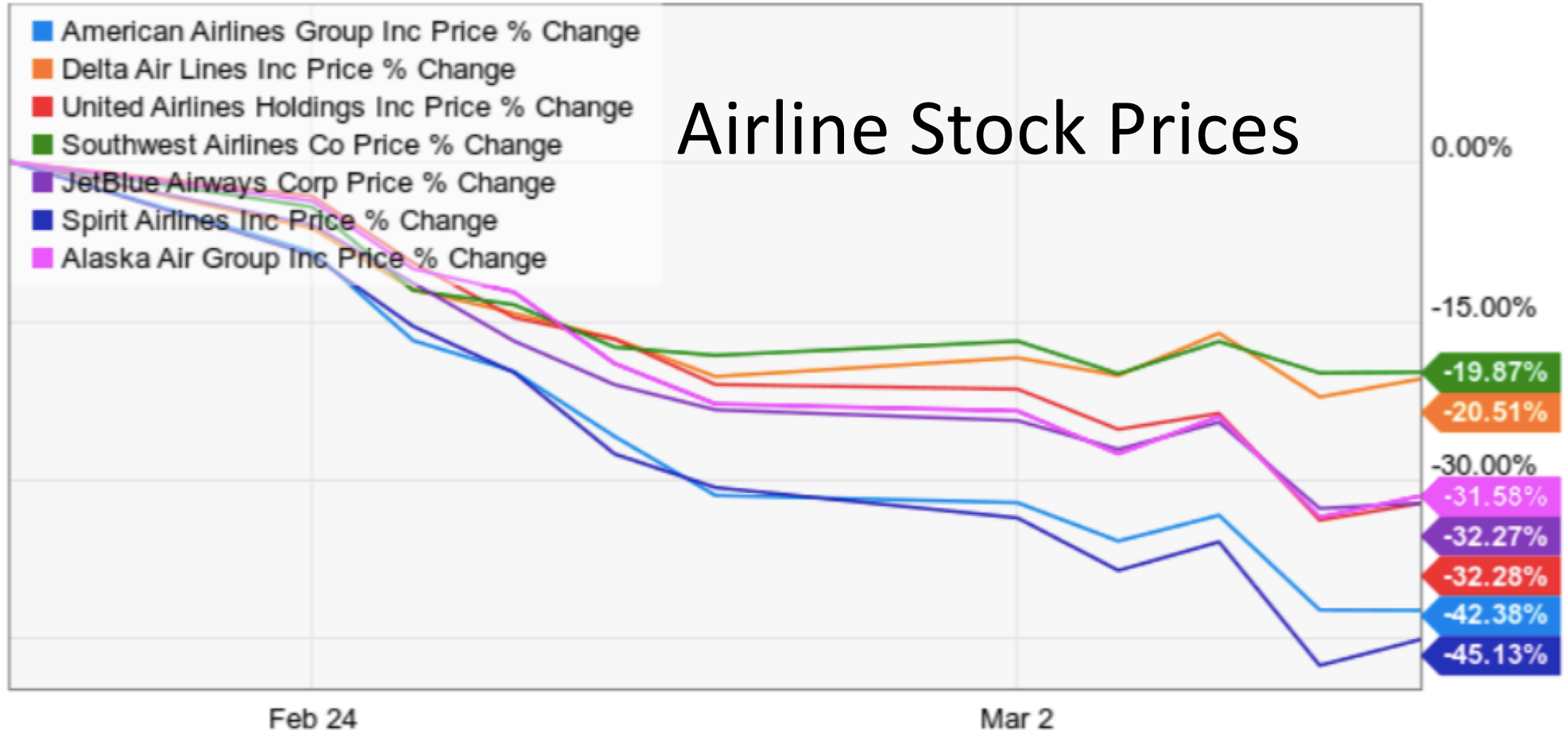


Source: Lorica April 1, 2020 The Data Exchange

Data: <https://www.tsa.gov/coronavirus/passenger-throughput>

Chart: thedataexchange.media

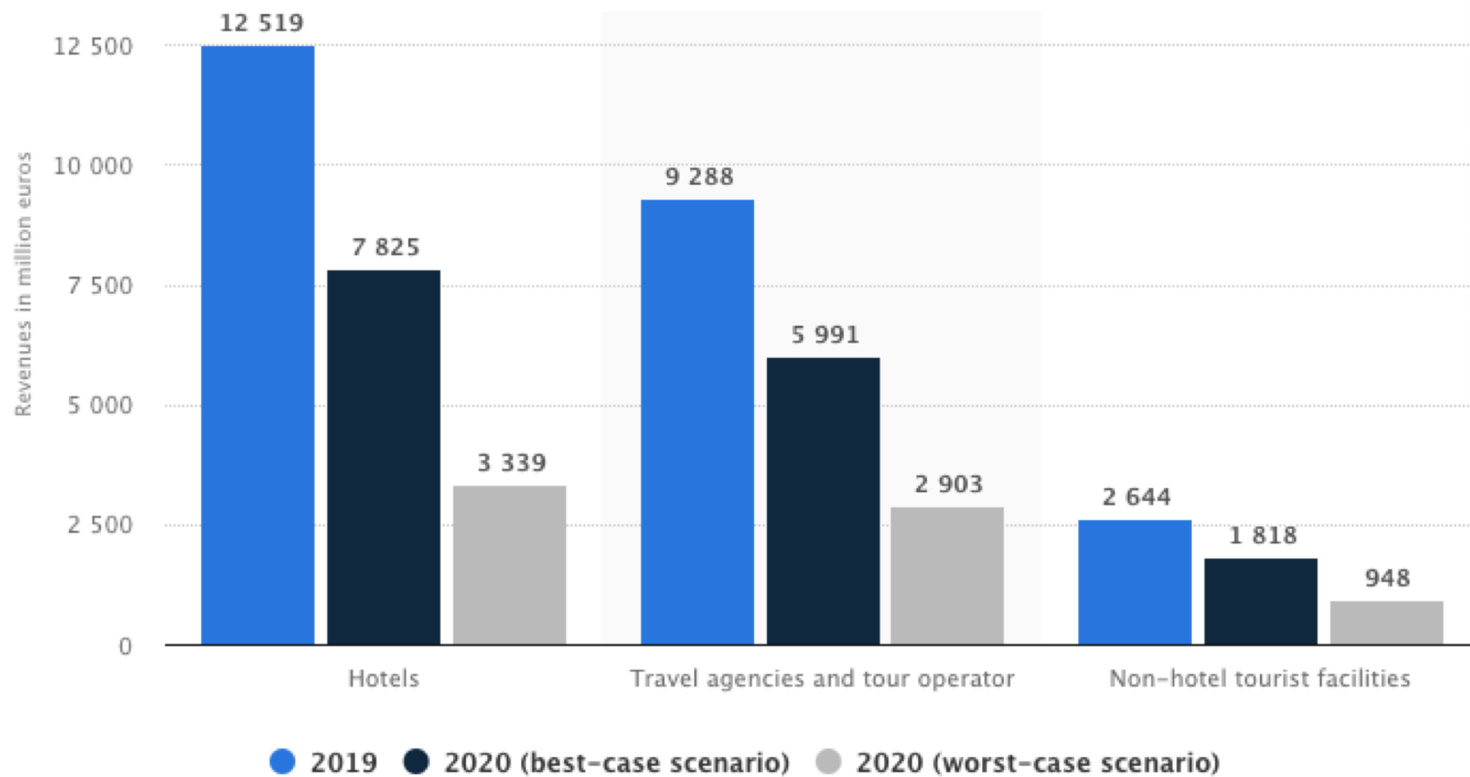
Airline Stock Prices



The Motley Fool

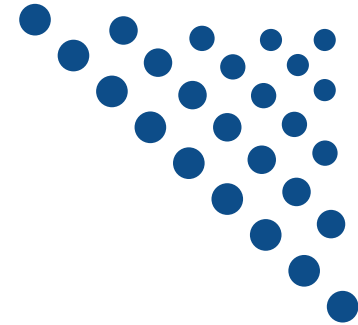
Mar 06 2020, 4:37PM EST. Powered by **YCHARTS**

Estimated impact of coronavirus (COVID-19) on revenues of the tourism industry in Italy in 2020, by sector



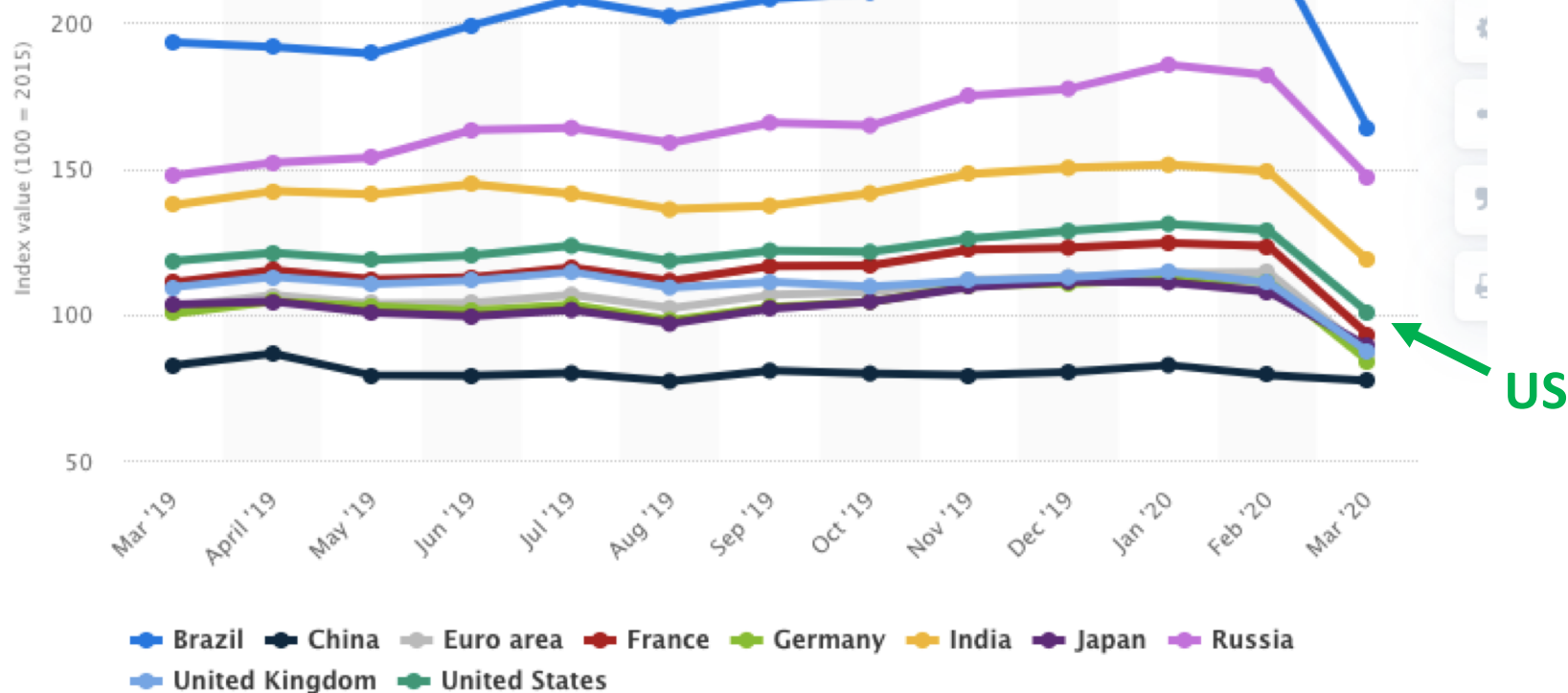
© Statista 2020

Source: Statista



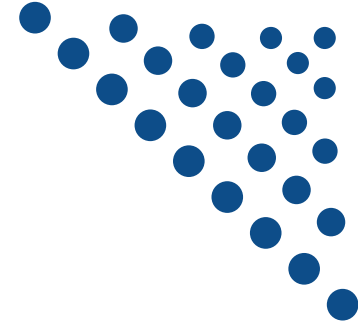
Stock Markets

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

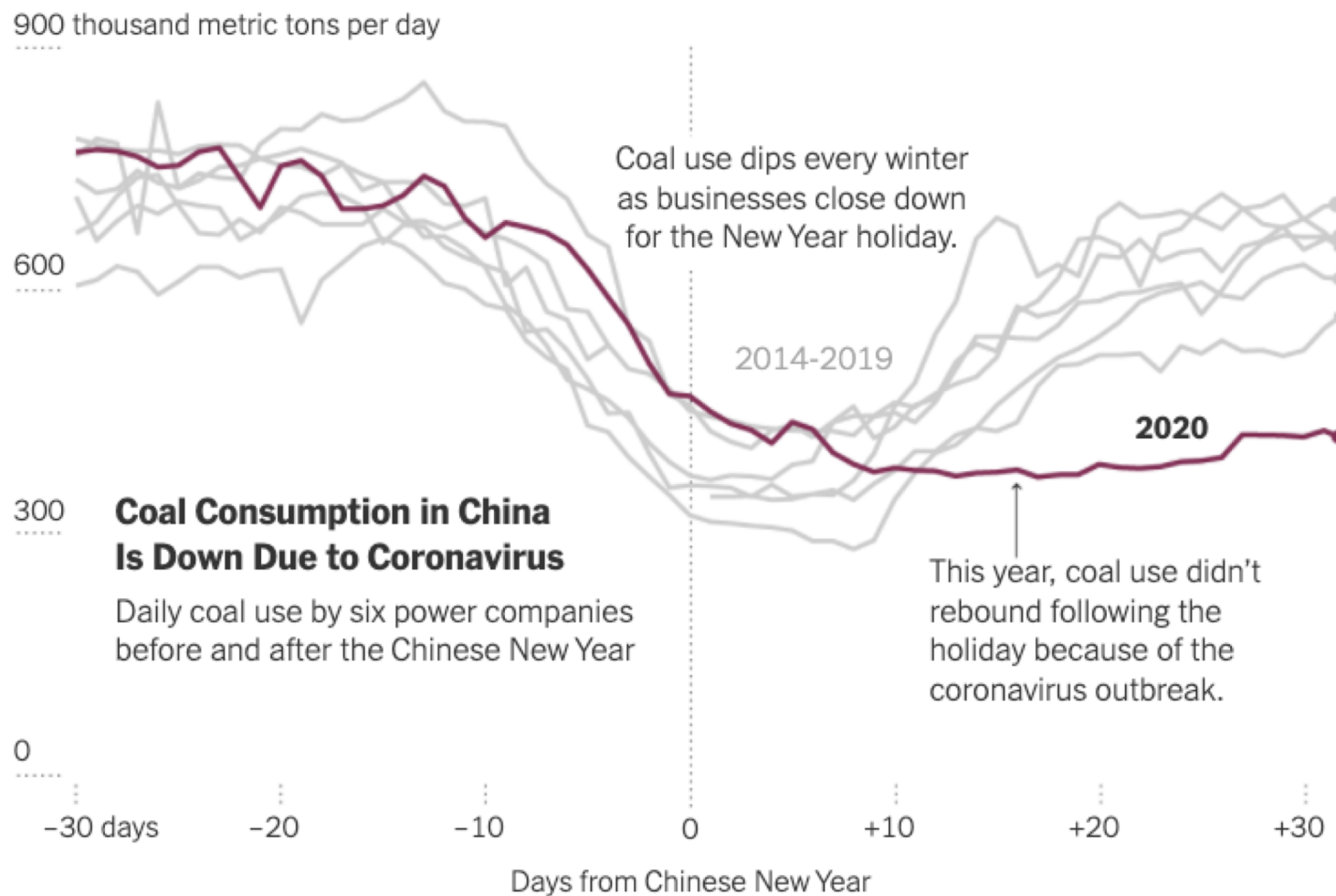


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Source: Statista



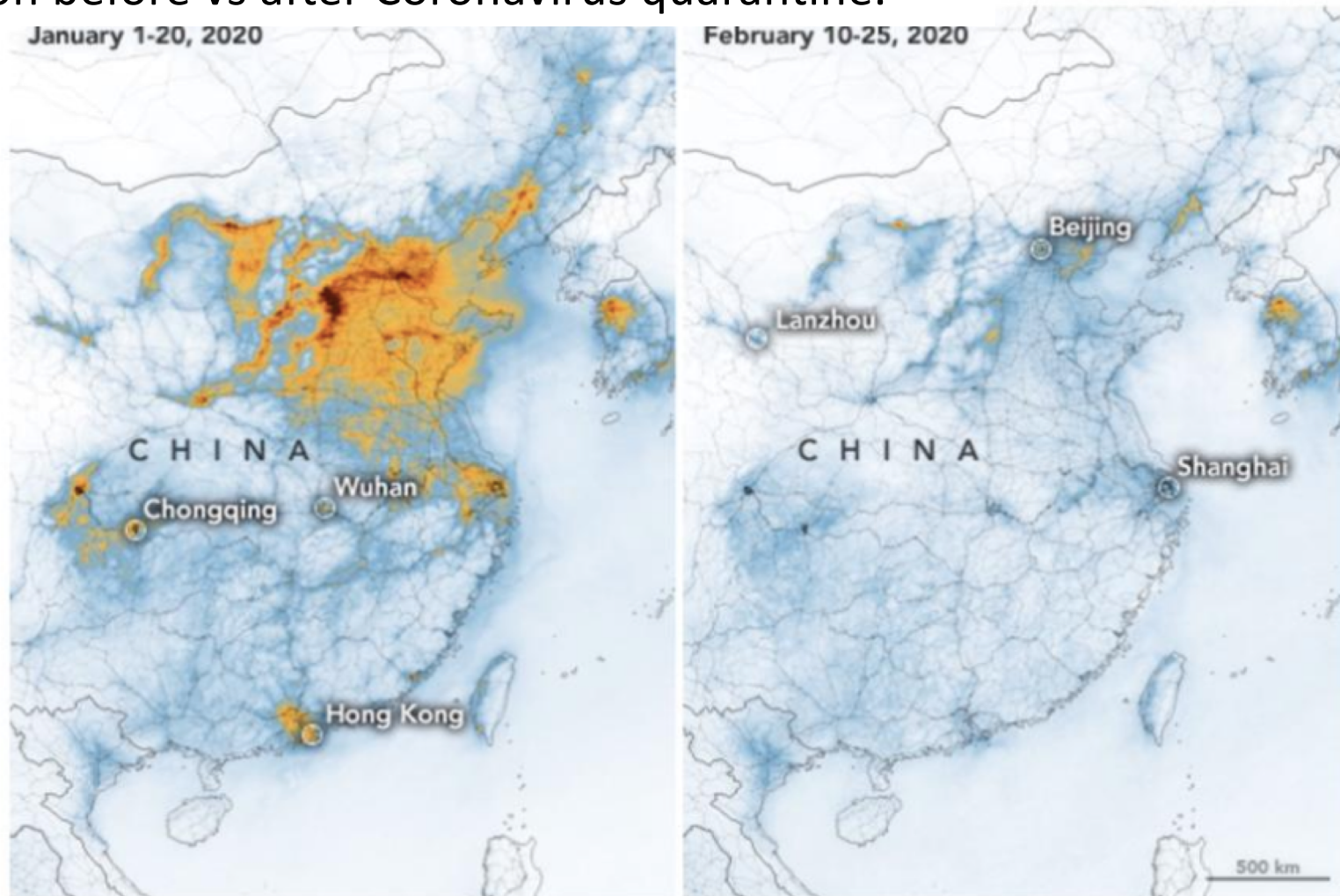
Factory Shut-downs



Source: Plumer
et al. Mar 6,
2020, NYT

Source: Centre for Research on Energy and Clean Air, based on data from WIND • By The New
York Times

Pollution before vs after Coronavirus quarantine.



NASA

Where have vehicle assembly plants closed?

Click on a state in blue to learn more.

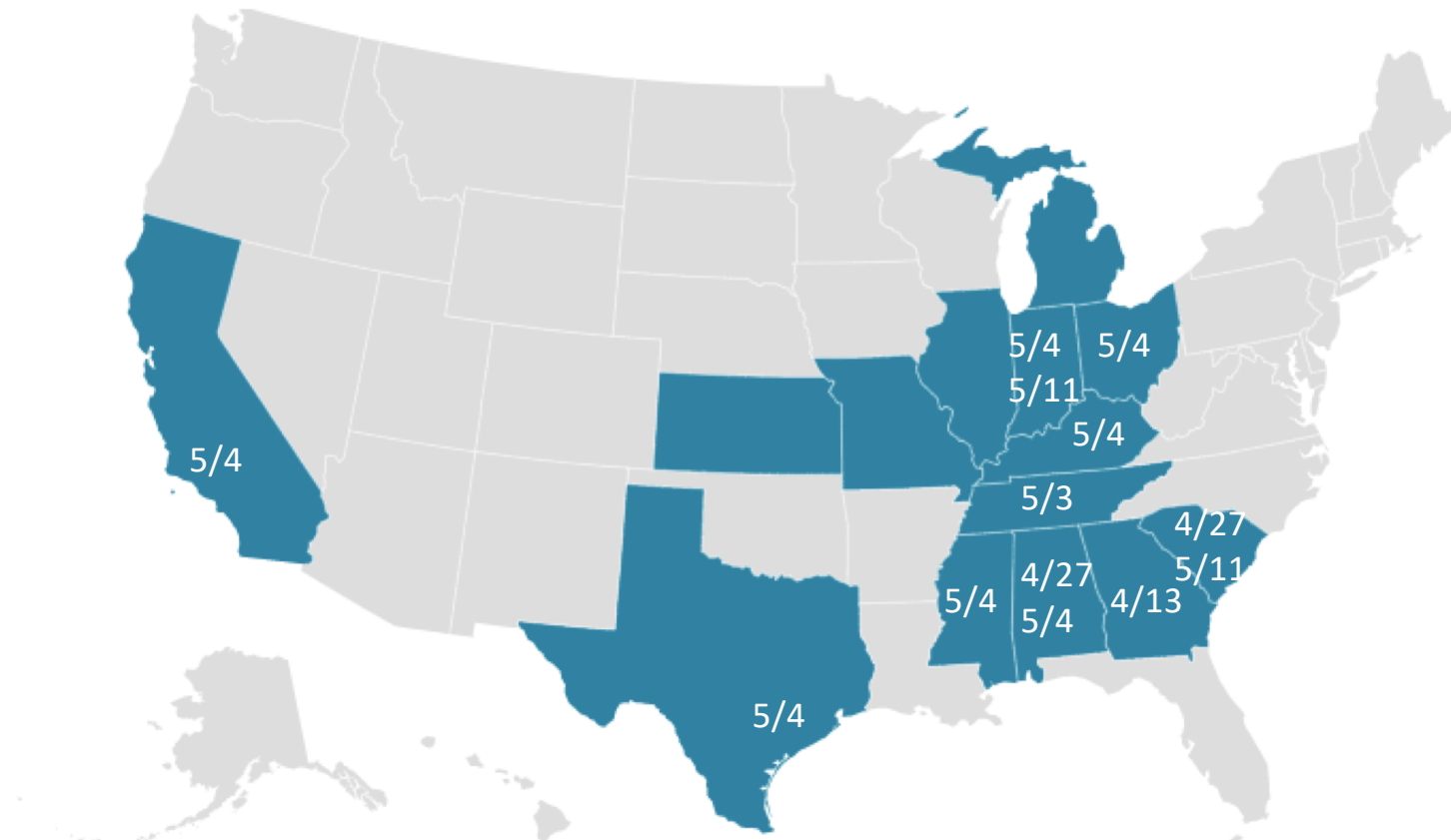
Plans to restart
As of Apr 22:

Ford: None

GM: None

FCA: sometime after May 3

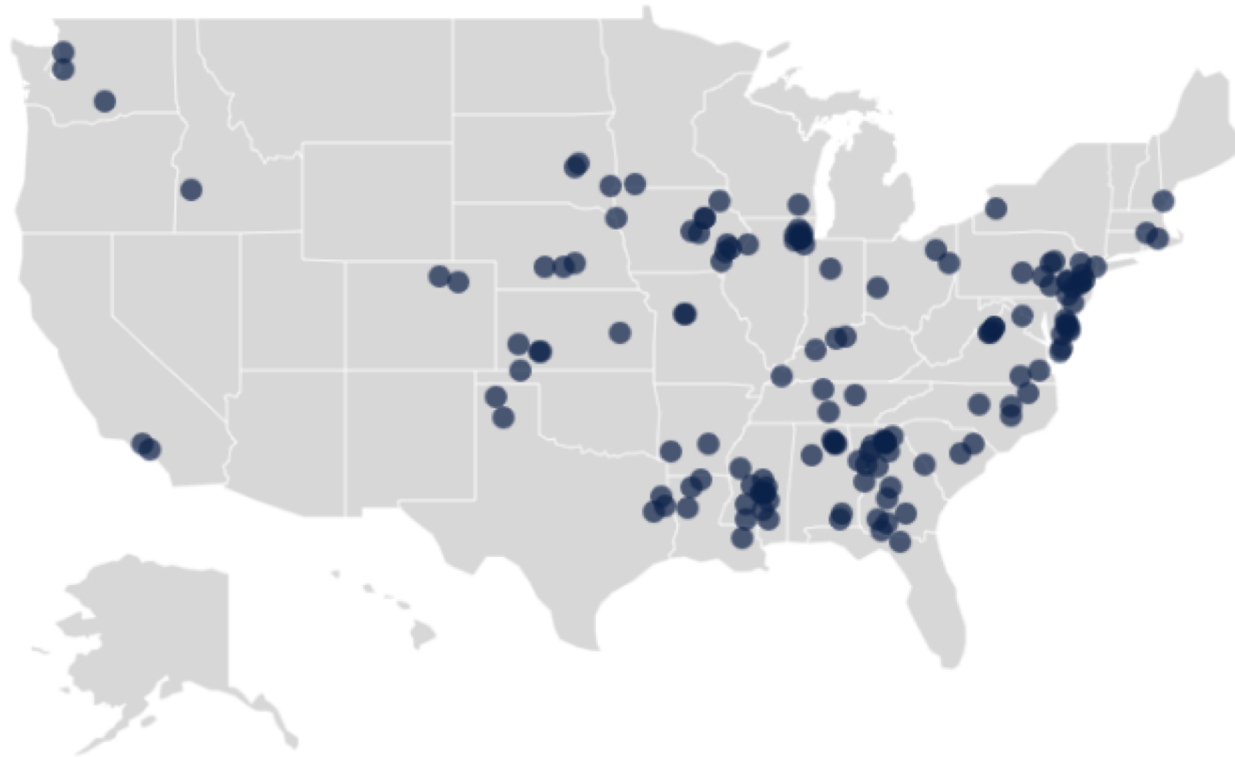
Others: See map



Source: Automotive News, March 25, 2020

Meat packing and COVID-19

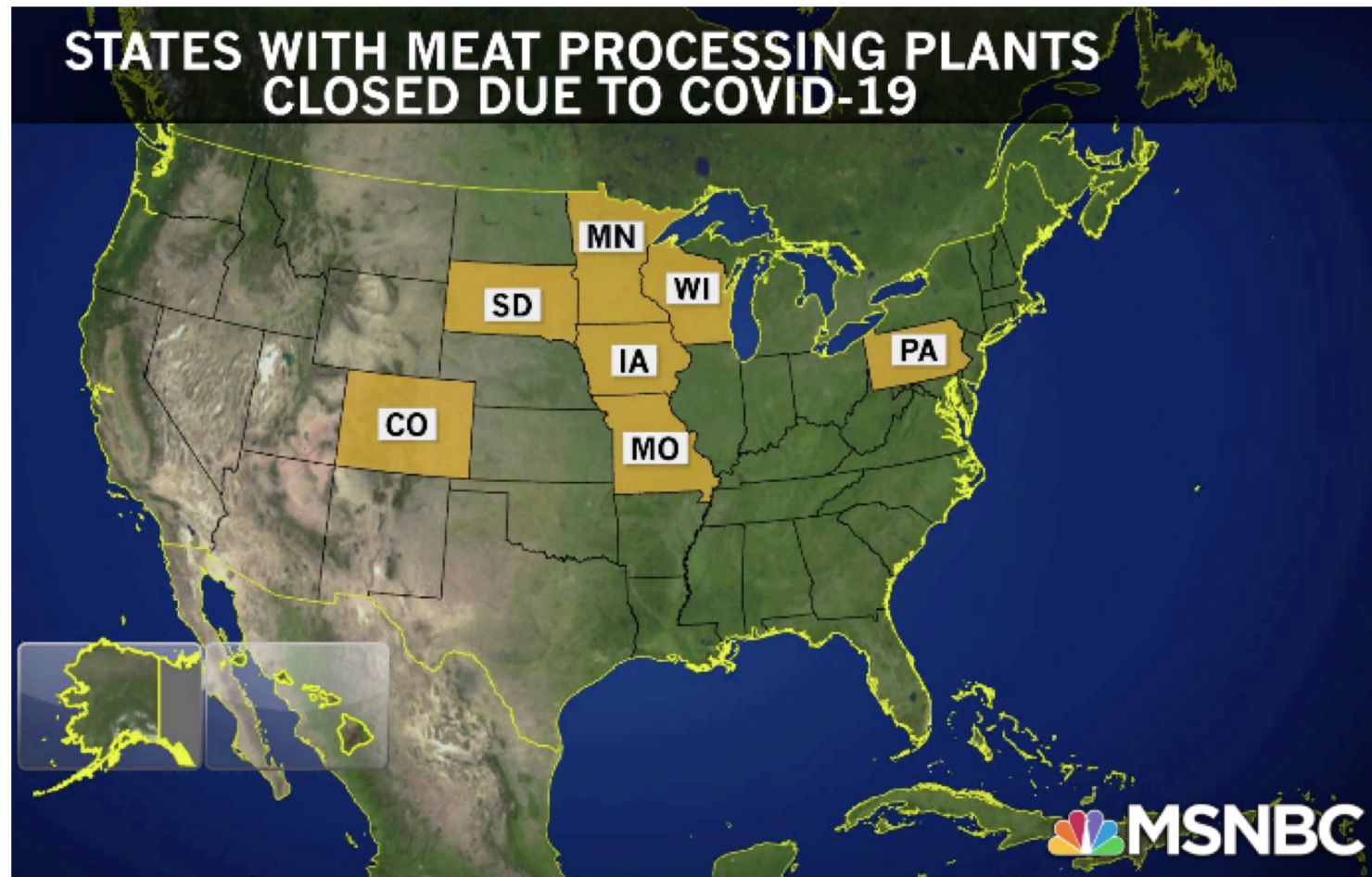
The map shows large meat packing factories in U.S. counties with an infection rate greater than 104 per 100,000 residents – a higher COVID-19 infection rate than 75 percent of US counties.



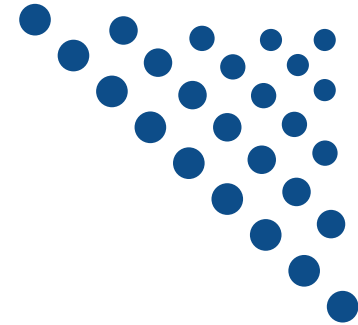
Source:
USA
Today
Apr 22

SOURCE: USDA; Johns Hopkins University;
WHO; CDC; USA TODAY Analysis

CARLIE PROCELL/USA TODAY



Source:
MSNBC
Apr 20



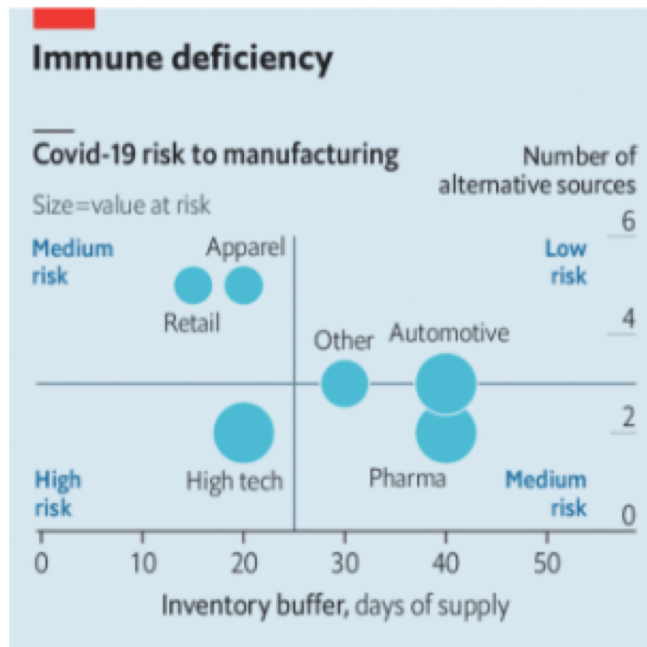
Supply Chains



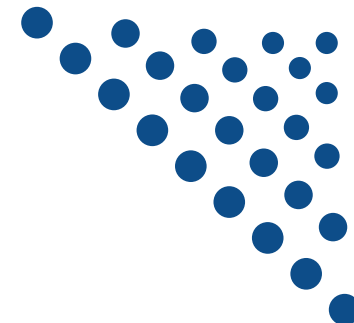
NATIONAL ECONOMIC
EDUCATION DELEGATION

Alan V. Deardorff - www.fordschool.umich.edu  UNIVERSITY OF MICHIGAN

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



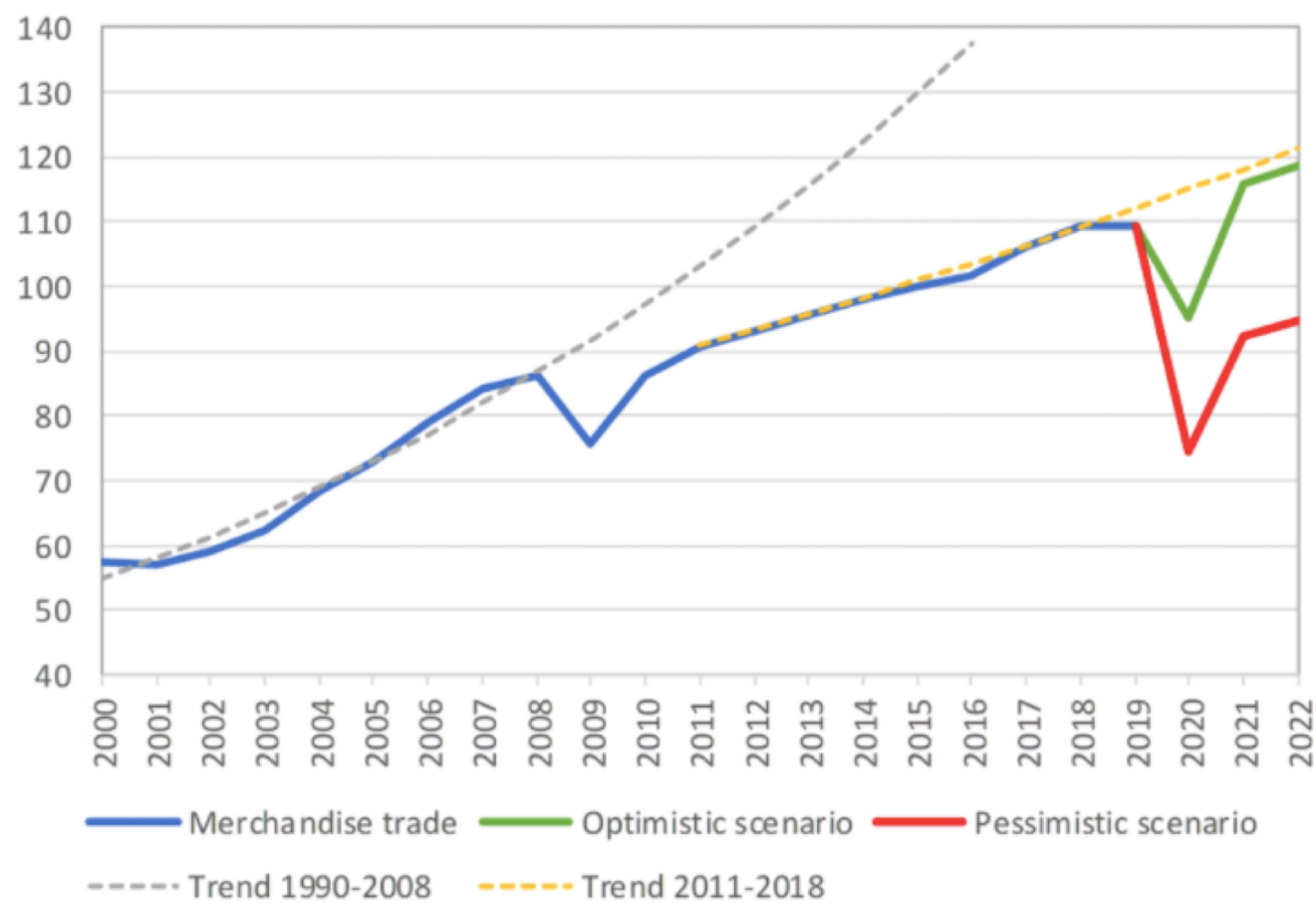
Source: *Economist*



Trade

Chart 1 - World merchandise trade volume, 2000–2022

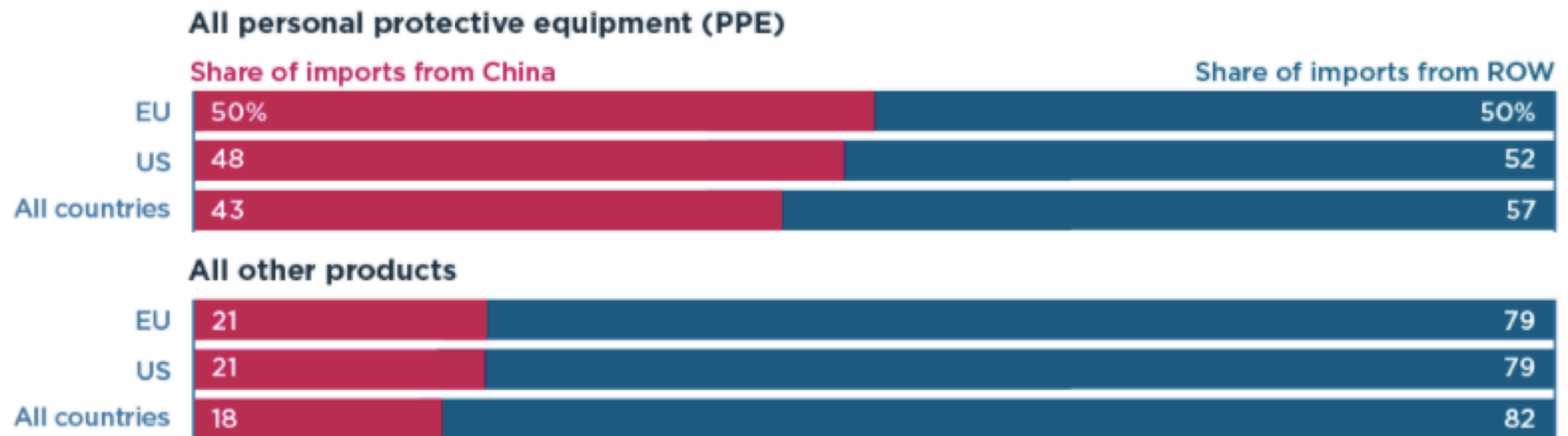
Index, 2015=100



Source: WTO Secretariat.

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

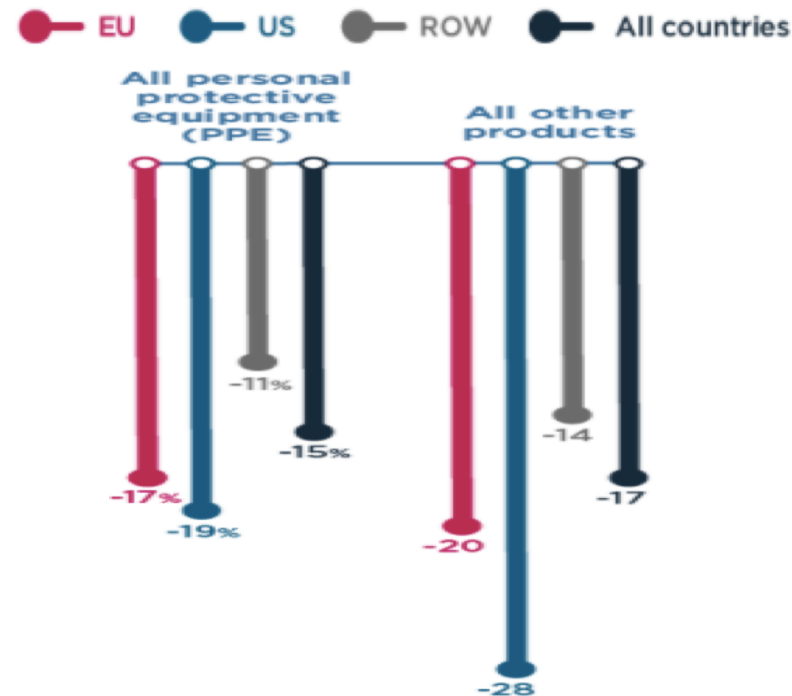
Imports by product and source, 2018



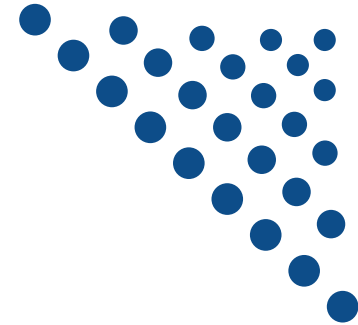
Source: Bown (2020)

China's exports of personal protective equipment fell less than its exports of other products

China's export growth in January and February 2020 relative to January and February 2019, by product and trading partner

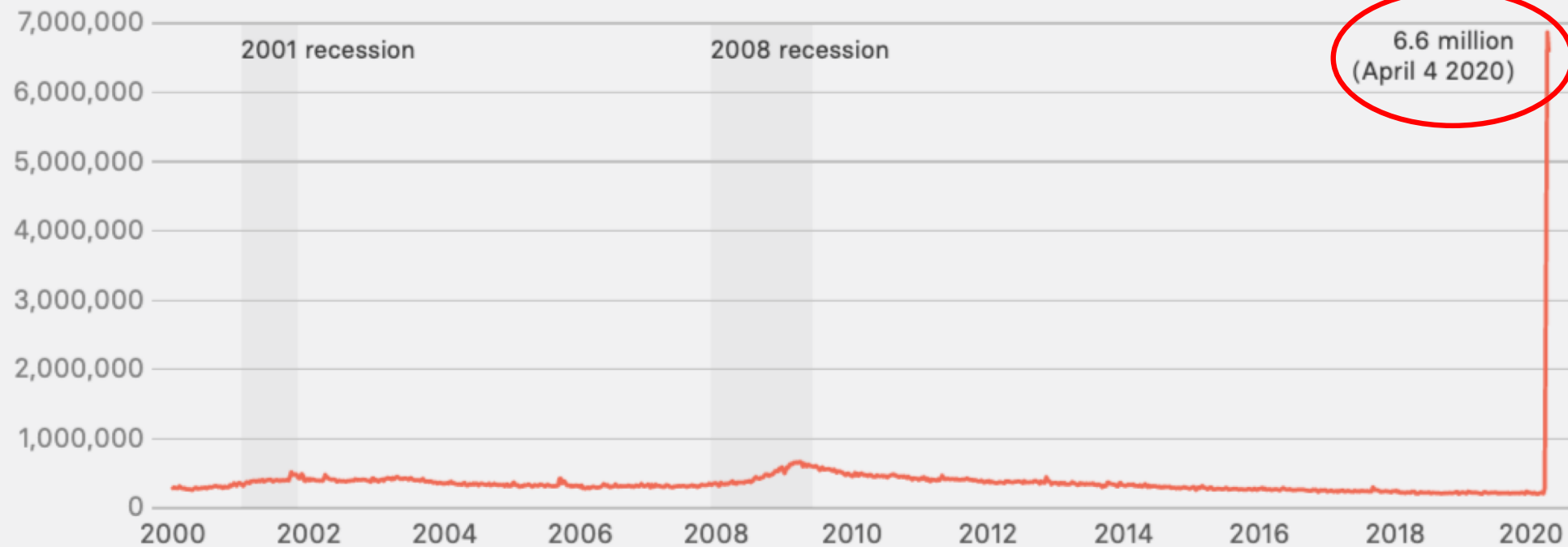


Source: Bown (2020)



Unemployment

Nationwide Unemployment Claims

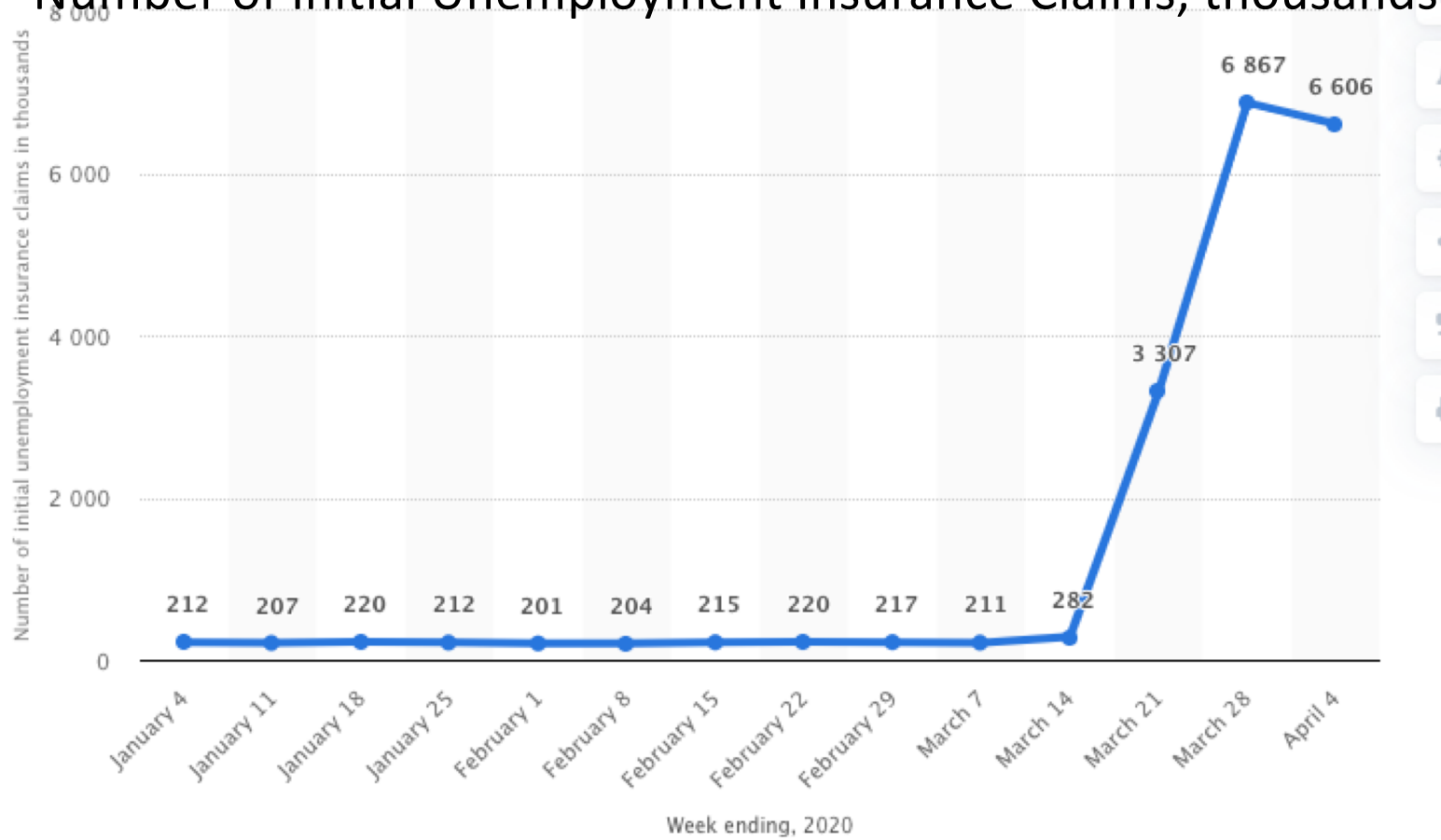


Notes: National data are seasonally adjusted.

Source: Department of Labor, NBER

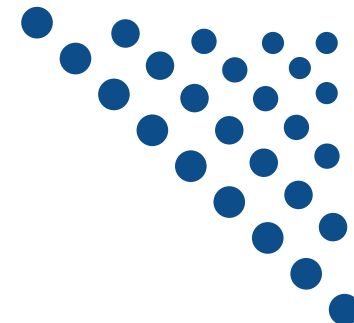
Source: *Buzzfeed*

Number of Initial Unemployment Insurance Claims, thousands



© Statista 2020

Source: Statista



GDP

SARS Epidemic, Hong Kong: GDP 2001-2004

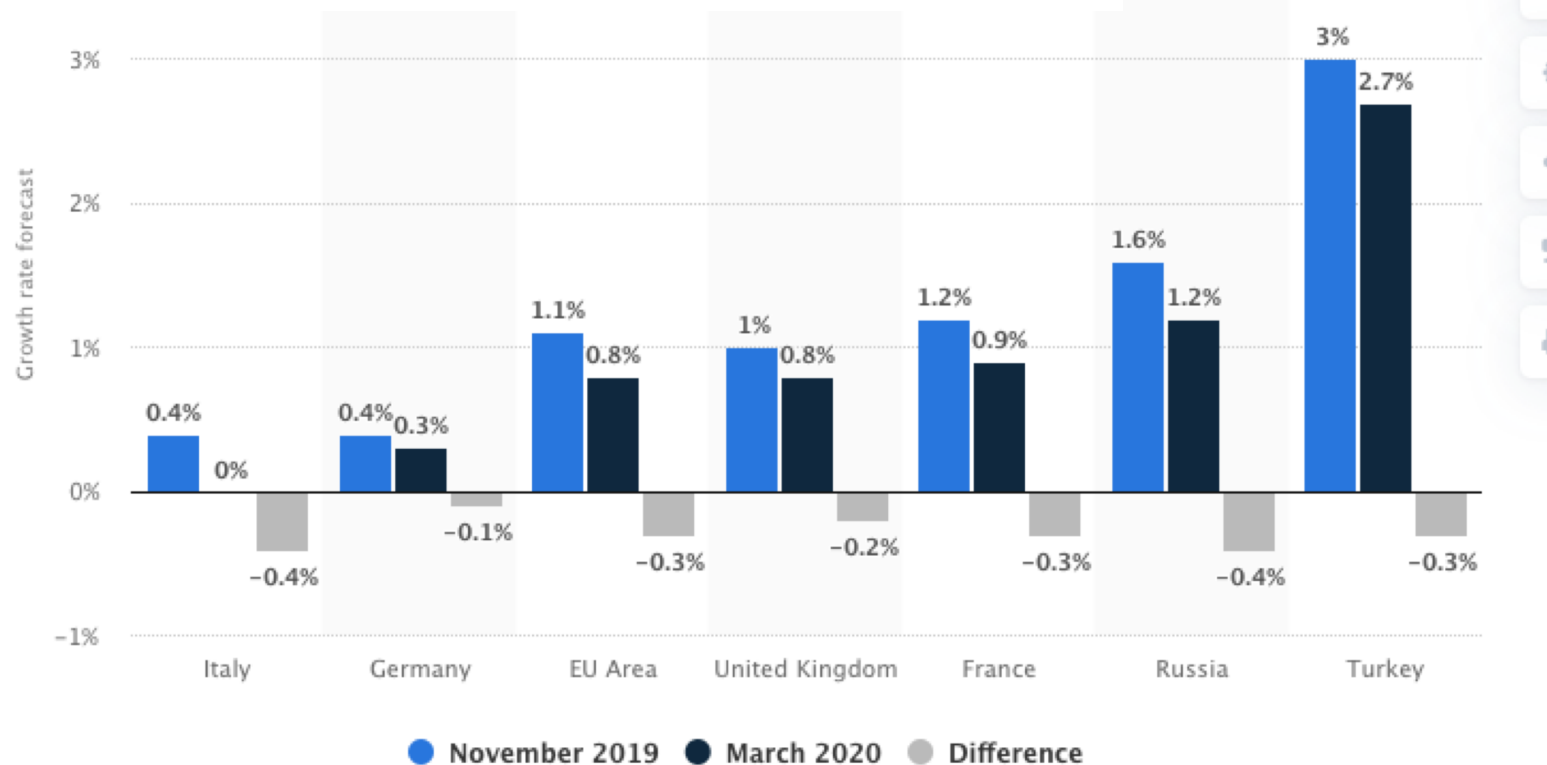


Source:
Gudell
2020

Zillow Economic Research | Source: Hong Kong Monthly Digest of Statistics, various issues.

Hong Kong GDP growth during the SARS outbreak

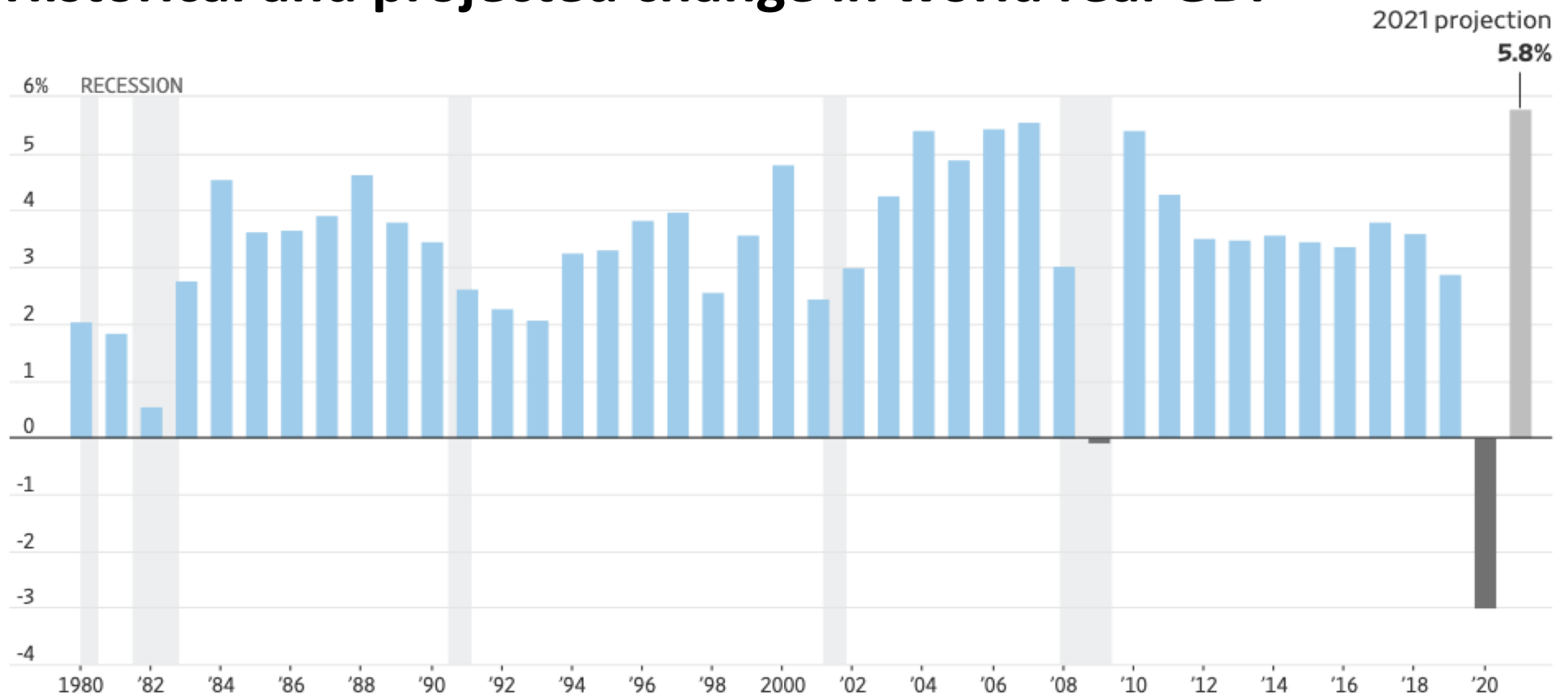
Real gross domestic product growth rate forecasts for selected European countries in 2020, by month of forecast



© Statista 2020

Source: Statista

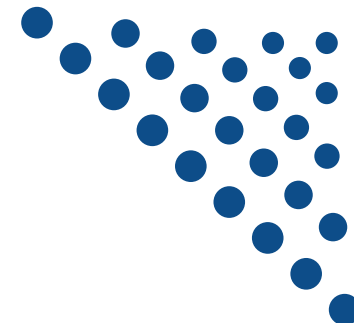
Historical and projected change in world real GDP



Source: International Monetary Fund

Screenshot

Source: WSJ Apr 15, 2020

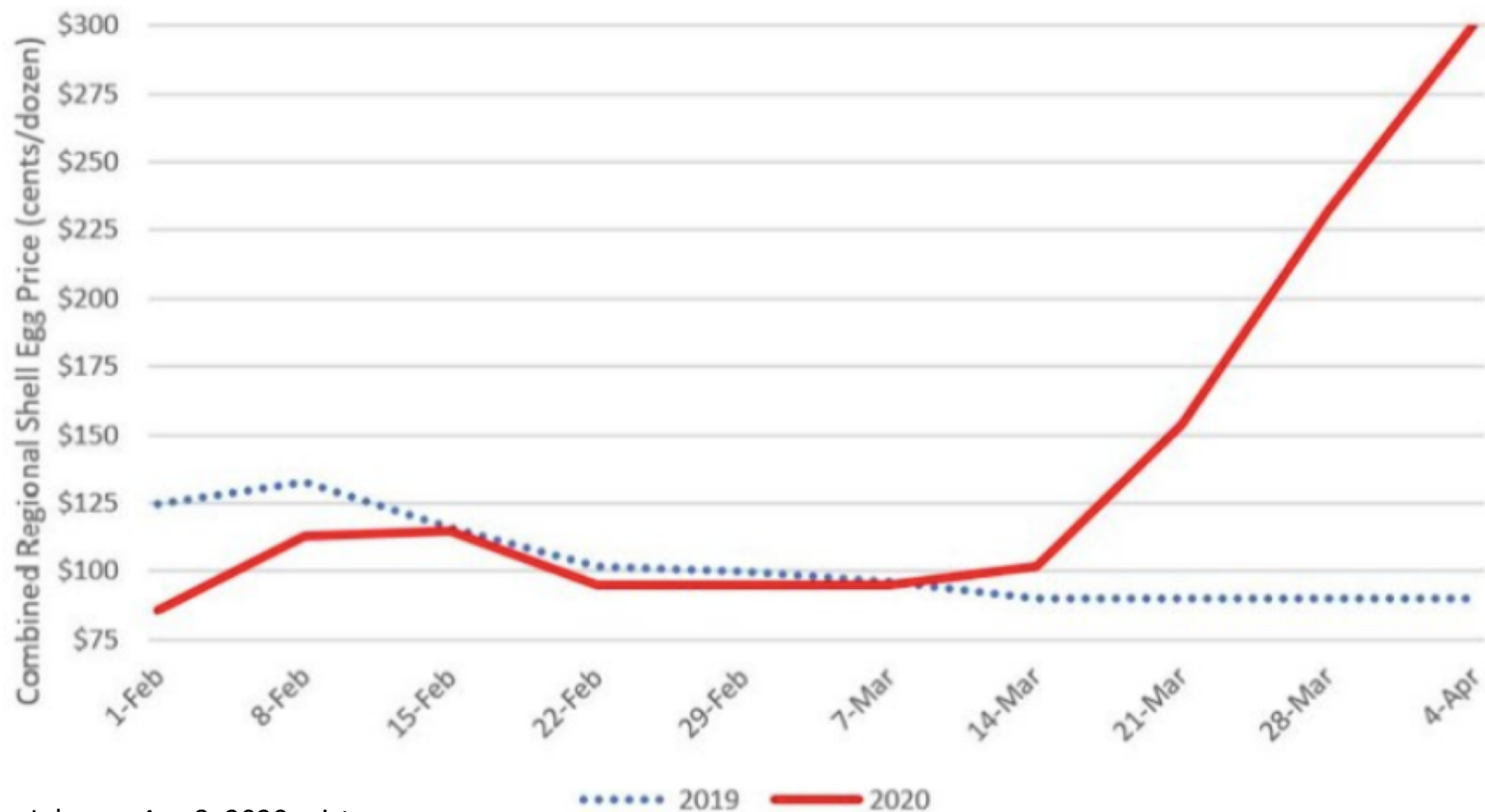


Shortages

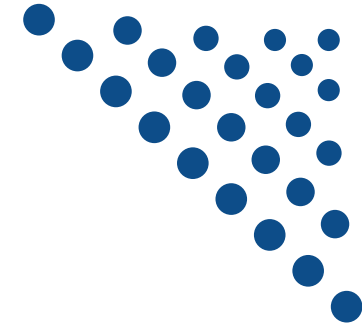


Source: Thurston, Mar 30. 2020

Wholesale Weekly Egg Prices

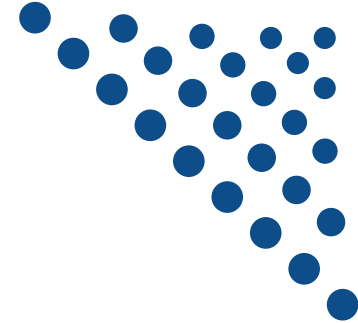


Source: Johnson Apr 8. 2020 grist



Effects of the Pandemic on Globalization

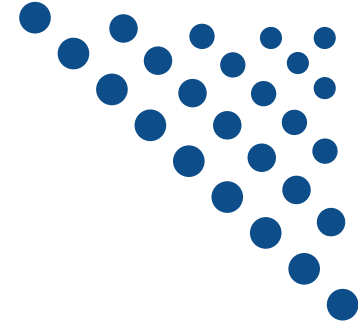
- **Effects of the Pandemic on Policies**
 - Travel restrictions
 - Export bans
 - Requests for reduced tariffs



Travel Restrictions

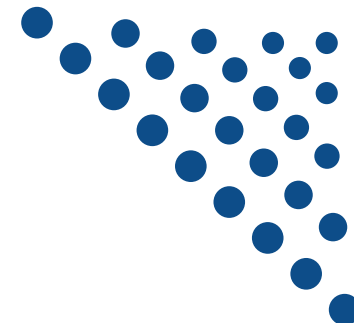


Source: Wikipedia



- **Headlines on Travel restrictions**

- Jan 31, NYT: **Trump Administration Restricts Entry Into U.S. From China**
- Mar 10, NYT: **U.S. to Suspend Most Travel From Europe**



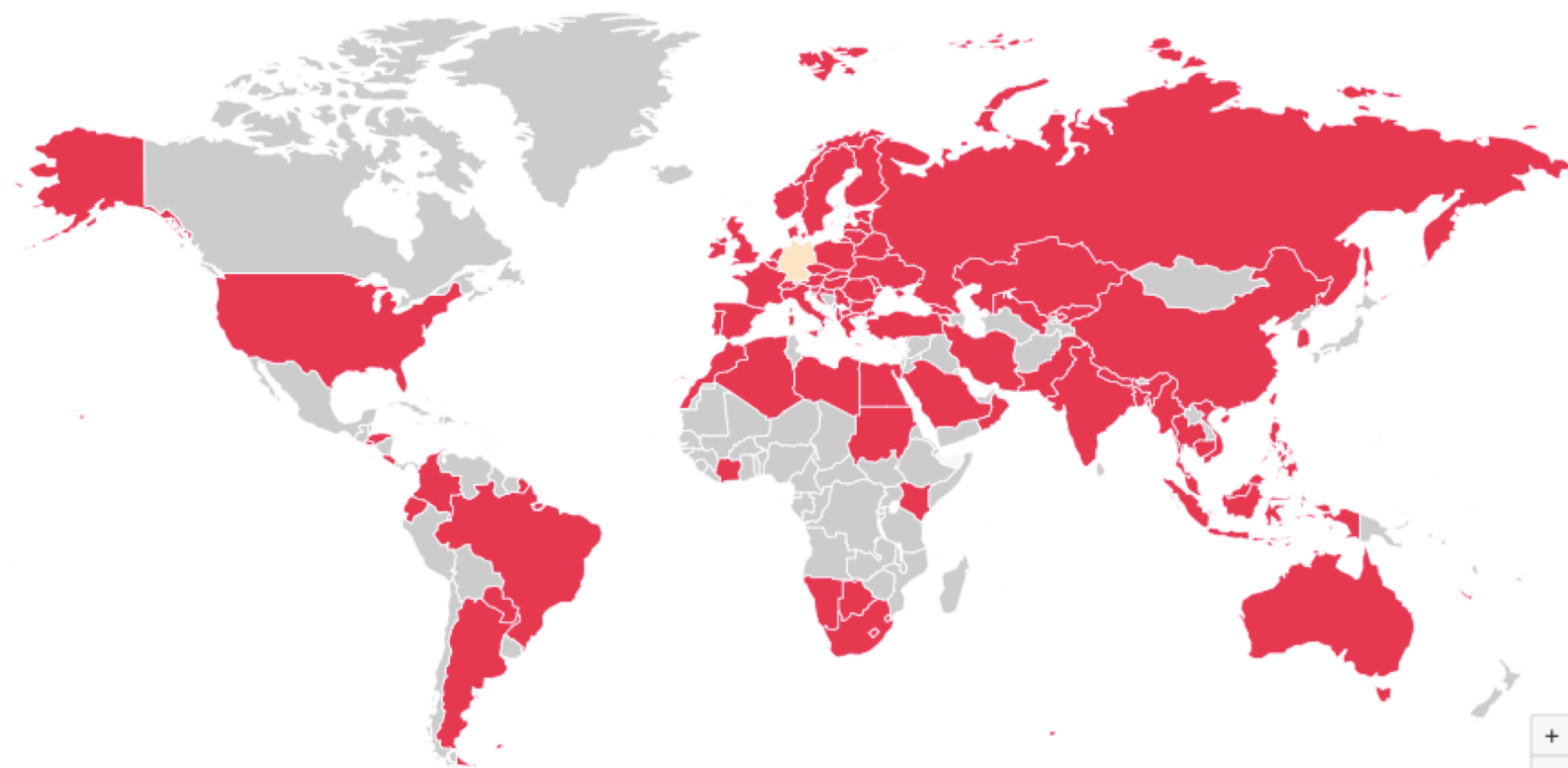
Export Bans

TEMPORARY EXPORT MEASURES

TEMPORARY IMPORT MEASURES

COVID-19 Temporary Export Measures

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



Temporary Export Measures

- Export restrictions/bans (82 countries)
- Export restrictions/bans adopted and repealed (1 country)
- None (156 countries)

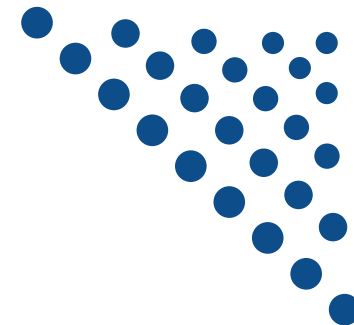
Source: ITC Market Access Map (www.macmap.org) based on media reports and official legislations

Source: ITC

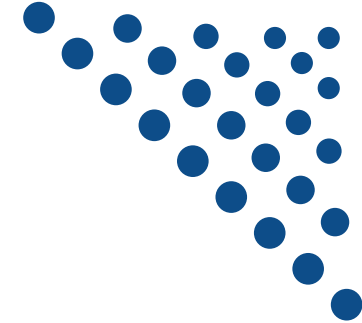


• Headlines on Export bans

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

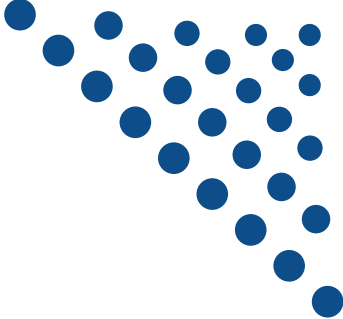


Reduced Tariffs (?)



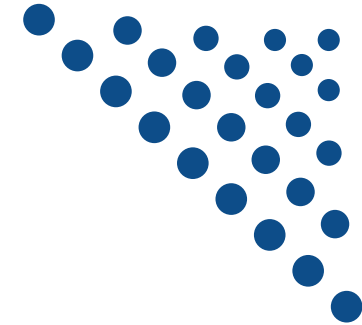
• Headlines on Reduced Tariffs (?)

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



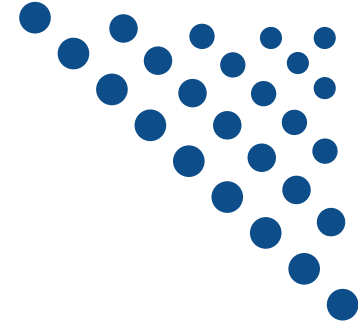
Globalization's Future?

Globalization's Future?



- **Will trade, travel, etc. come back?**
 - Yes, partly
- **Will it reach the previous trend**
 - Probably not.
 - It didn't after the financial crisis
- **Will attitudes change?**
 - Yes.
 - Firm's will try to limit exposure
 - Consumers will learn to live differently
- **Will economists' view of globalization change?**
 - I think so.
 - We still think globalization is good, but it should include greater protections

Thank you!



Any Questions?

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