



Contemporary Trade Issues

OLLI, Santa Clara University
May, 2022
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1

1

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.



2

2

Who Are We?

- **Honorary Board: 54 members**

- 2 Fed Chairs: Janet Yellen, Ben Bernanke
- 6 Chairs Council of Economic Advisers
 - o Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
- 3 Nobel Prize Winners
 - o Akerlof, Smith, Maskin

- **Delegates: 645+ members**

- At all levels of academia and some in government service
- All have a Ph.D. in economics
- Crowdsource slide decks
- Give presentations

- **Global Partners: 48 Ph.D. Economists**

- Aid in slide deck development

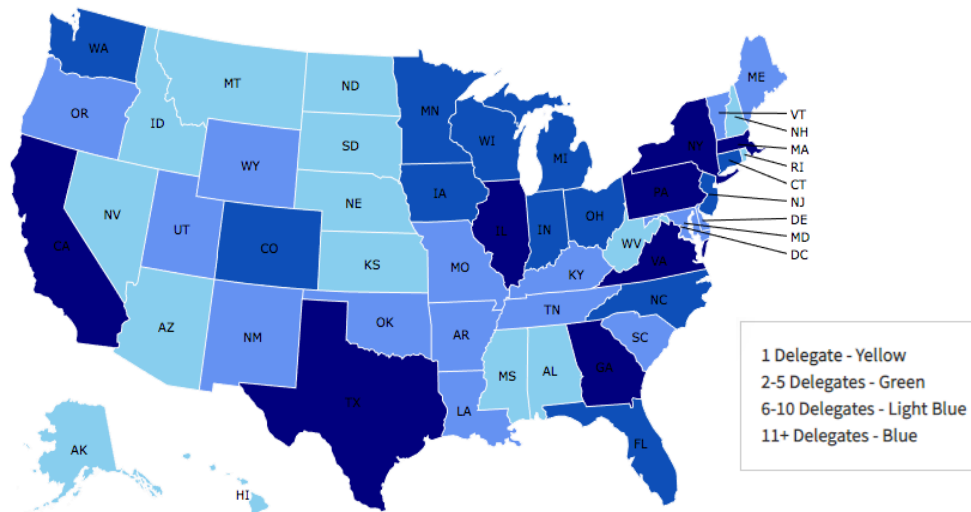


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3

3

Where Are We?



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4

4

Credits and Disclaimer

- **This slide deck was authored by:**

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- **Disclaimer**

- NEED presentations are designed to be nonpartisan.
- It is, however, inevitable that the presenter will be asked for and will provide their own views.
- Such views are those of the presenter and not necessarily those of the National Economic Education Delegation (NEED).



5

Outline

- **Globalization**
- **International Trade**
- **Offshoring**
- **The Benefits and Costs of Trade**
- **The U.S. Trade Deficit**



6

What is Globalization?

- **The growing interdependence of the world's:**

- Economies
- Cultures
- Populations

- **Brought about by cross-border flows of:**

- Goods and services
- Technology
- Investment
- People
- Information



7

What Drives Globalization?

- **Transportation**
- **Technology**
- **International Cooperation**

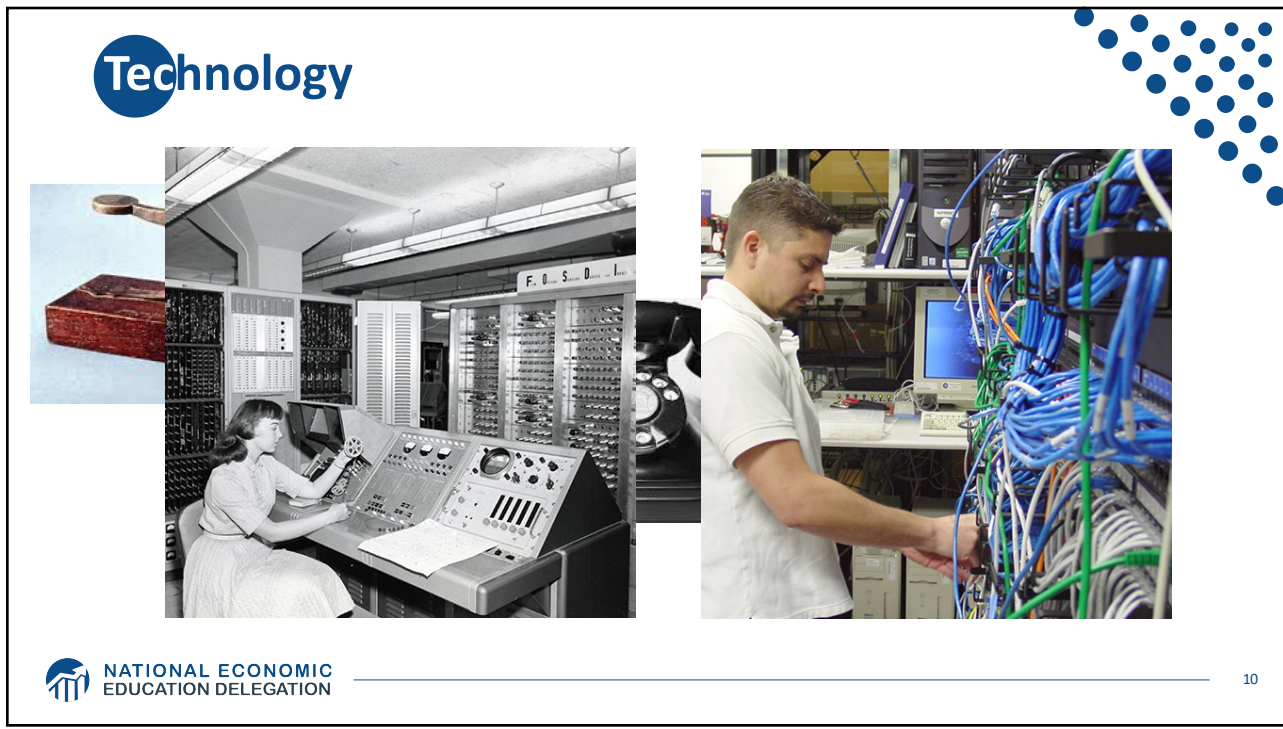


8

Transportation



Technology



International Cooperation



1995
World Trade Organization (WTO)

The modern trading system governed by rules is established, replacing the GATT.

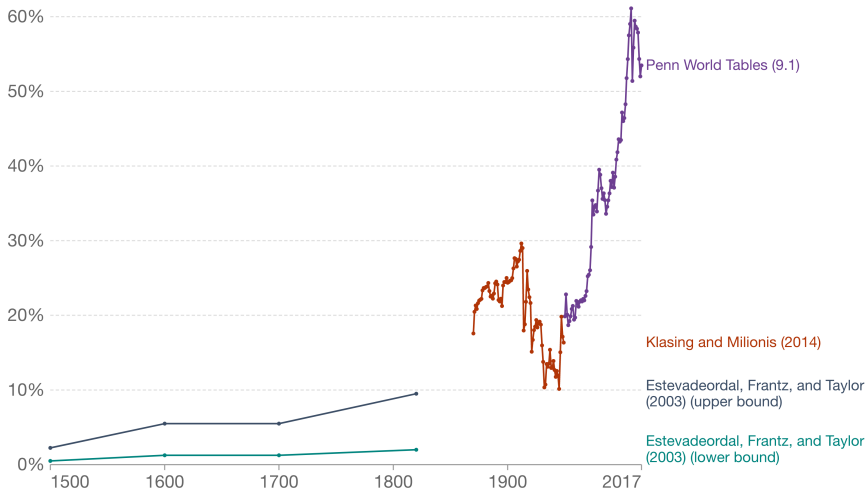
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11

Globalization over 5 centuries

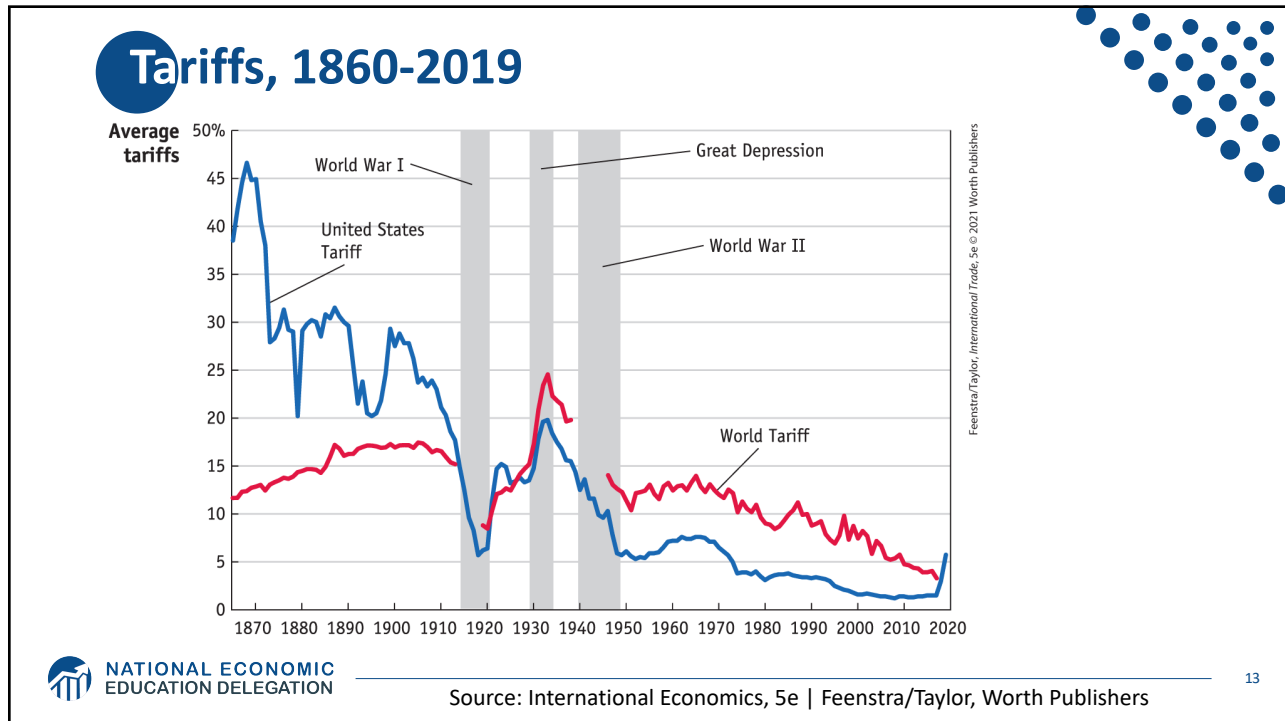
Shown is the "trade openness index". This index is defined as the sum of world exports and imports, divided by world GDP. Each series corresponds to a different source.

 Our World in Data



Source: Estevadeordal, Frantz, and Taylor (2003), Klasing and Milionis (2014), Feenstra et al. (2015) Penn World Tables 9.1
 OurWorldInData.org/trade-and-globalization • CC BY

12



13

International Cooperation – Ending?



2017 — 2018

President Donald Trump Repudiates Trading System

Trump withdraws from the Trans-Pacific Partnership (TPP), threatens to abandon NAFTA (then later negotiates a preliminary deal that adds new restrictions), and criticizes WTO rules as unfair to the United States. His administration imposes tariffs against China and US allies, which escalates into a tit-for-tat trade war.

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14

Russia – Ukraine War

- **How the war affects globalization**

- The war and trade sanctions disrupt trade (wheat, oil)
- Financial sanctions by governments disrupt financial linkages
- Private companies cease or reduce their operations in Russia



Russia and Ukraine Trade

- **Russia's trade in 2019:**

- Total trade represents a small share of world trade (1.7%).
- Trade(% of GDP): 49.44%
- Fuels represent 51.95 % of their exports.
- Top 5 destinations are: China, Netherlands, Germany, Belarus, Turkey
- Top 5 exporters: China, Germany, Belarus, United States and Italy.

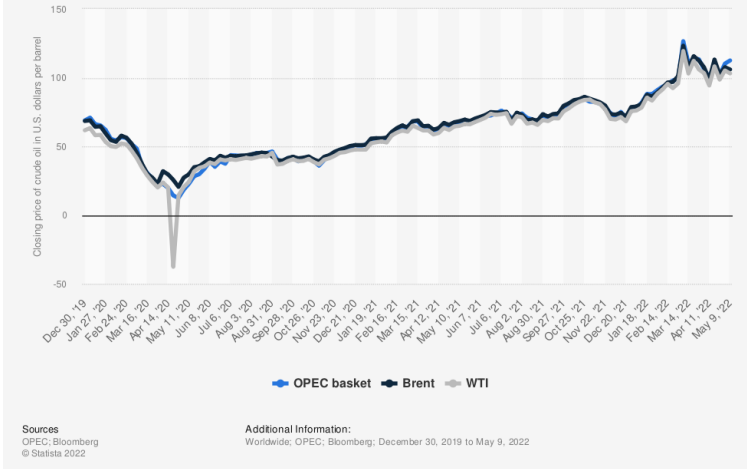
- **Ukraine's trade in 2018:**

- Trade (% of GDP): 90.41%
- Top export products: cereals (sunflower, wheat, maize) and metals
- Top 5 destinations are: Russia, Poland, Italy, Turkey, and Germany
- Top 5 exporters: Russia, China, Germany, Belarus, and Poland



Oil Price

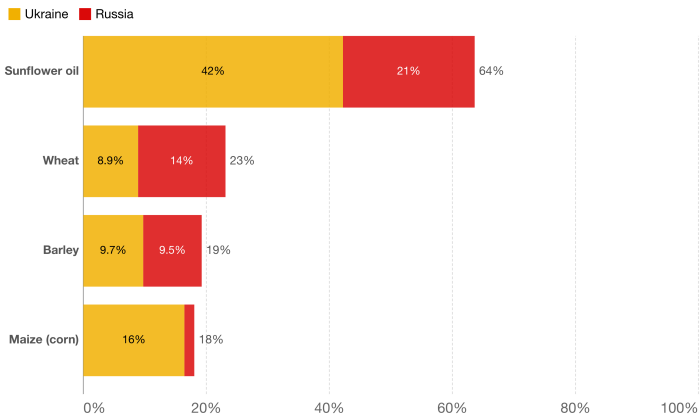
Weekly Brent, OPEC basket, and WTI crude oil prices from December 30, 2019 to May 9, 2022 (in U.S. dollars per barrel)



17

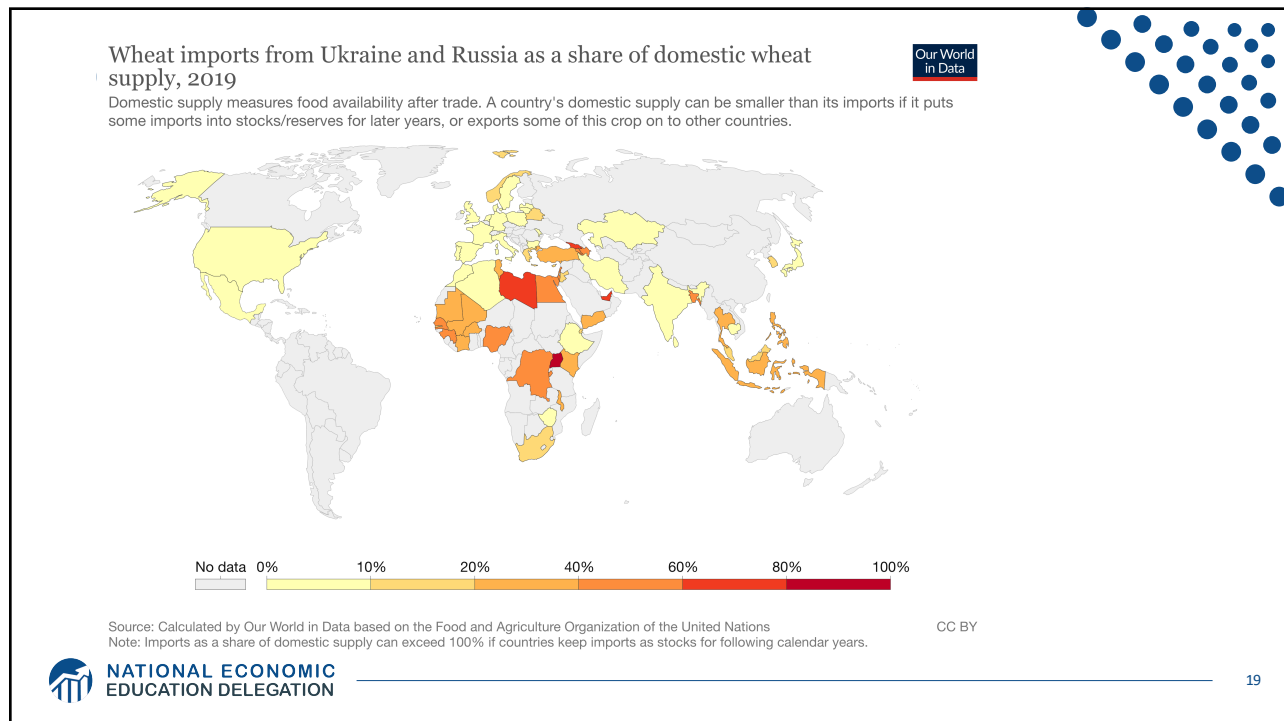
Russia and Ukraine Food Exports

Global food exports: how much comes from Ukraine & Russia?, 2019
This is shown for the largest crops grown by Ukraine and Russia.



Source: Calculated by Our World in Data based on the Food and Agriculture Organization of the United Nations
OurWorldInData.org/agricultural-production • CC BY

18



19

Effect of Sanctions

- **It too early to say whether the sanctions will work.**
- **Past sanctions have sometimes worked.**
- **Preliminary evidence suggests that the Russian economy is holding up (The Economist, May 2022):**
 - Russian consumer prices have increased by more than 10%.
 - The Russian economy is shrinking (predicted 5% GDP decline)
 - The rouble is back to its level before the war started (bolstered by capital controls and high interest rates)
 - Since the invasion, Russia exported at least \$65 billion dollars worth of fossil fuels
- **If Russia becomes more isolated, these unprecedented sanctions will get Russia to withdraw, but it is not guaranteed.**

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20

20

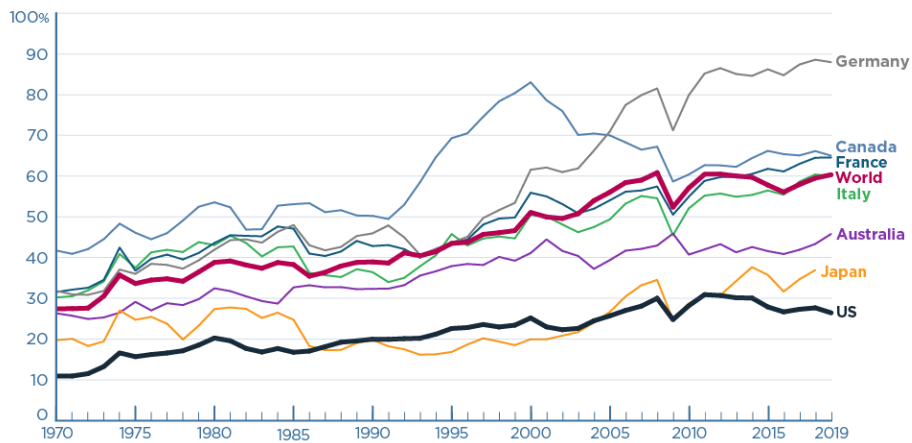
International Trade

Exports and Imports

21

US trade openness has declined while that of other large advanced economies has increased

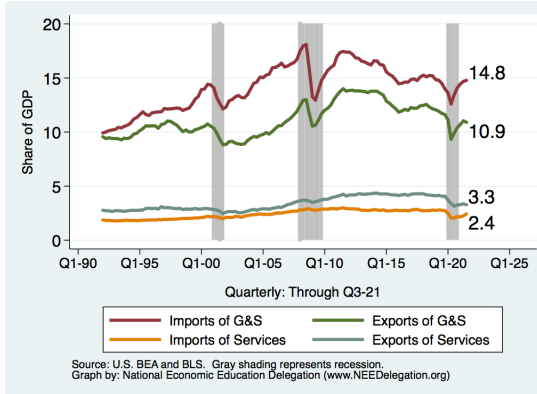
a. Trade in goods and services as percent of GDP, 1970-2019



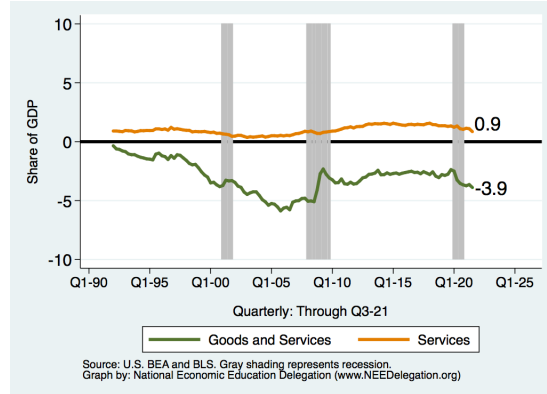
22

Importance of US Trade

• US trade as % of GDP



• US trade balance as % of GDP



23

What do we Export? (\$1.51 Trillion in 2019)

Rank	U.S. Export Product	% of Total Exports
1	Machinery and appliances	13.7%
2	Mineral fuels and oils, and products	13.2%
3	Electrical machinery and equipment	10.8%
4	Vehicles and their parts	8.68%
5	Instruments and apparatus	6.71%

24

What do we Import? (\$2.37 Trillion in 2019)

Rank	U.S. Import Product	% of Total Imports
1	Machinery and appliances	15.7%
2	Electrical machinery and equipment	13.9%
3	Vehicles and their parts	13%
4	Mineral fuels and oils, and products	8.34%
5	Pharmaceutical products	5.35%

25

Top US Trade Partners (Goods, 2019)

• Top 5 US export destinations

Rank	Export Destination	% of Total Exports
1	Canada	16.8 %
2	Mexico	15.6 %
3	China	6.82 %
4	Japan	4.61 %
5	Germany	3.91 %

• Top 5 US import sources

Rank	Import Source	% of Total Imports
1	China	18.1 %
2	Mexico	15.2 %
3	Canada	13.2 %
4	Japan	5.6 %
5	Germany	5.47 %

26

Global Value Chains (Offshoring)

27

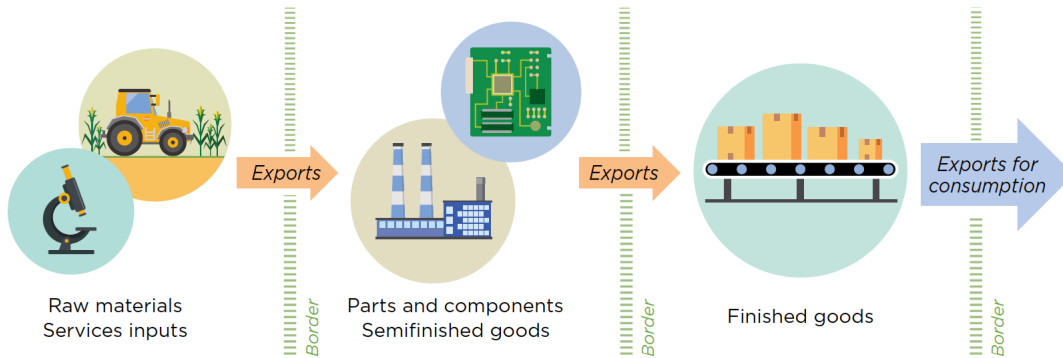
Offshoring – A New Form of Globalization



28

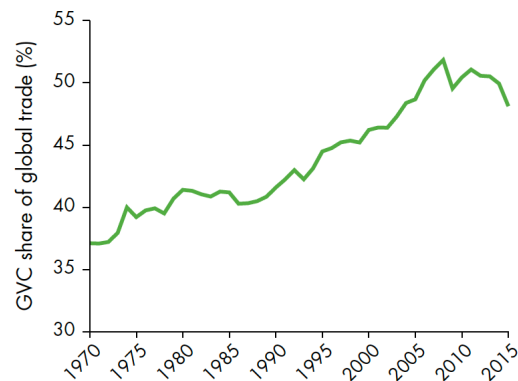
What is Offshoring?

A global value chain breaks up the production process across countries. Firms specialize in a specific task and do not produce the whole product.



Related to Trade

- **Offshoring overlaps with trade because it**
 - ... typically involves imports of intermediate goods (components) or services
- **Still: Offshoring is important by itself**
 - Hard to imagine almost any manufactured consumer good in the US without offshoring (imported inputs)
 - Has distinct implications for US firms, employment, and welfare



An Example: Bicycles

Saddle exports
 China: US\$100 million
 Italy: US\$85 million
 Spain: US\$16 million

Frame exports
 China: US\$977 million
 Vietnam: US\$147 million
 Italy: US\$66 million

Brake exports
 Japan: US\$200 million
 Singapore: US\$172 million
 Malaysia: US\$152 million

Wheel exports
 China: US\$170 million
 Italy: US\$28 million
 France: US\$26 million

Pedal and crank exports
 Japan: US\$150 million
 China: US\$137 million
 Singapore: US\$117 million

Source: WDR 2020 team, using data from UN Comtrade database. See appendix A for a description of the databases used in this Report.

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31

Source: World Development Report, 2020

31

An Example: The Boeing 787 Dreamliner

Wingtips
KAA (Korea)

Fixed & Movable Leading Edge
Spirit (US)

Wing
Mitsubishi (Japan)

Movable Trailing Edge
Hawker de Havilland (Australia)

Fixed Trailing Edge
Kawasaki (Japan)

Forward Fuselage
Kawasaki (Japan)

Center Fuselage
Alenia (Italy)

Rear Fuselage
Boeing (US)

Forward Fuselage
Spirit (US)

Lithium-ion Batteries
GS Yuasa (Japan)

Landing-Gear Structure
Messier-Dowty (France)

Nacelles
Goodrich (US)

Engines
Rolls-Royce (UK)
General Electric (US)

Passenger Doors
Lecoere (France)

Wing-to-Body Fairing
Boeing (US)

Tailfin
Boeing (US)

Tailfin Leading Edge
Shenyang Aircraft Corp. Ltd. (China)

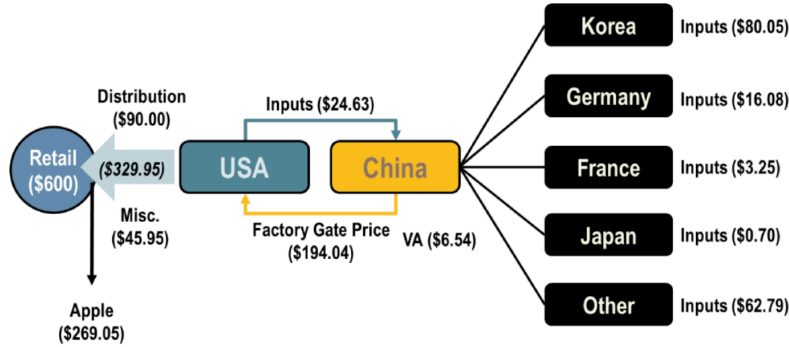
Rudder
Chengdu Aircraft Corp. Ltd. (China)

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32

32

An Example: The iPhone 4



Value Creation and Capture, iPhone 4

Source: adapted from OECD (2011) "Global Value Chains: Preliminary Evidence and Policy Issues", Organization for Economic Co-operation and Development, DSTI/IND(2011)3, Paris,

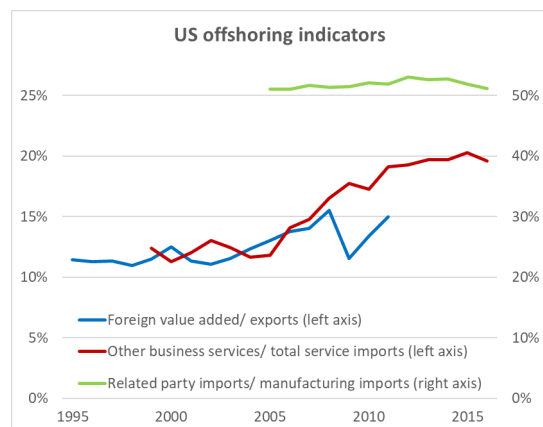
2011.



Source: The Geography of Transport Systems, 5th edition by Jean-Paul Rodrigue

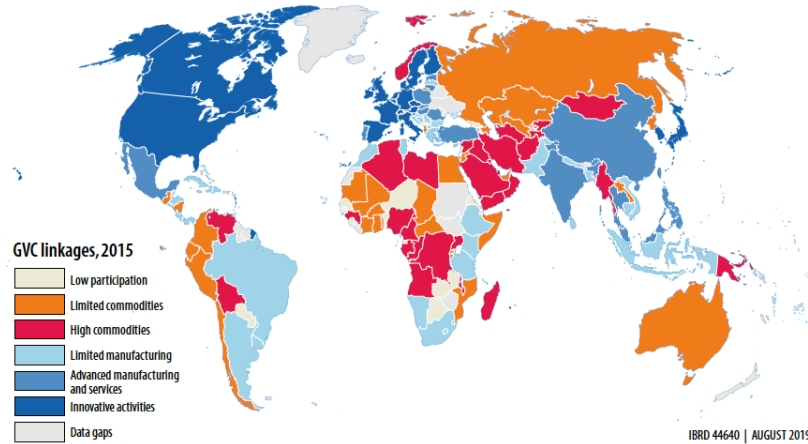
How Much Offshoring Has Happened?

- Offshoring is hard to measure
- Three indicators for its rise:
 - Share of foreign value added in US exports increased from 11% to 15% (1995-2011)
 - Import share of other business services rose from 12% to 20% in the US (1999-2016)
 - Related party trade: Intra-firm offshoring makes up 51-53% of US imports (2005-16)



How Much Offshoring Has Happened?

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



Source: WDR 2020 team, based on the GVC taxonomy for 2015 (see box 1.3).

Why Do Countries Trade?

- Competition
- Varieties
- Efficiency

Why Might Efficiency Differ Across Countries?

- **Labor**
 - Skilled or unskilled
- **Technology**
 - Some countries have firms that produce some goods well
 - Other countries have firms that produce other goods well
- **Environment**
 - Cold/Warm Wet/Dry Sunny/Cloudy
- **Land**
 - Rocky, soil, fertile, barren
 - Tundra, desert, grasslands, forest



37

Comparative Advantage and Specialization

- **Comparative advantage**
 - Scarce resources: can't produce unlimited amounts of goods
 - Export goods where production advantage largest (or disadvantage weakest)
- **Non-econ example: Babe Ruth**
 - Top pitcher during 1916-1918. But best hitter of all time!
 - o Scarce resources: training time
 - o Post 1918, Babe Ruth specialized as hitter
- **Econ example: US-UK trade in 1951**
 - For same output, US used less resources than UK in each of 26 manuf sectors!
 - But, US net exporter to UK only for sectors where it's advantage largest
 - UK net exporter to US for goods where it's disadvantage weakest



38

Benefits of Specialization

- For goods where US production advantage weakest...
- US can consume these goods by either
 1. Importing them from UK
 2. Producing them *and* reducing production of goods exported to UK
- Key point
 - US can consume more of these goods by importing them from UK
- Analogous story true for UK
 - Trade increases size of economic pie for *both* countries

39

Comparative Advantage - Summary



- Every country has a good or a set of goods that it is **RELATIVELY** better at producing.
 - Those are the goods that it will export.
 - It will import the other goods.
- There are exceptions.
 - Varieties and competition
 - May find countries trading the same goods back and forth.

40

Trade Contributes to Growth

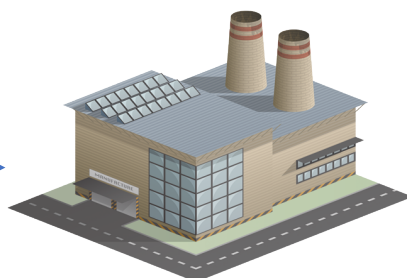
- **EFFICIENCY:**
 - Allocates production across countries efficiently so that countries can specialize in what they are best at producing.
 - Most productive firms expand and export
- **Varieties**
 - More choice for consumers.
 - Better inputs for our production.
- **Competition**
 - Brings in cheaper goods.
 - Makes consumers better off.
- **Economies of Scale**
 - Trade makes some industries bigger, more cost efficient. Lowers prices.



How to Think About Imports

- **Think about international trade as the introduction of a new technology.**

Soy Beans
(Exports)



Laptops/iPhones
(Imports)

Why Do Firms Engage in Offshoring?

- **Main motive for offshoring: Costs savings**
 - Firms benefit from international specialization along global value chains
- **Typically US firms seek cheap labor → Prime offshoring destinations: Low-wage countries like China (14%) and Mexico (10% of US imports of intermediate goods in 2011)**
- **Classic examples:**
 - Automotive parts offshored to Mexico
 - Call centers offshored to India
- **But also: Access to raw materials, intermediate goods, or specific technologies → EU (20%) and Canada (17%)**



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43

Why is the public turning against trade?

- **Gains from trade are very large for the economy, BUT**
 - Not always noticeable by consumers. Why are prices lower at WalMart?
 - Not always that large per consumer: consumers might save \$50/year on some imported goods
 - For 300 million consumers, \$50/year would be \$15 billion per year savings to the country!
- **Costs of trade are very high for some workers and groups, and these costs have not been sufficiently appreciated or addressed by policymakers (or economists!)**



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44

Distributional Impacts of Trade: Basic Insights

- **Previous slides**

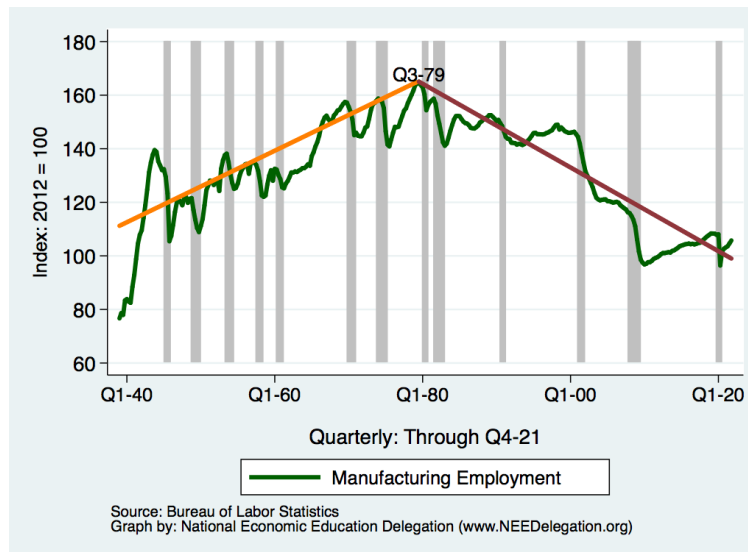
- Trade increases “the size of the pie” for each country
- Ignores how trade impacts distribution of the pie in each country

- **Basic insights from trade theory**

- If trade decreases demand for a factor, it generally loses from trade
 - o Factors “stuck” in import-competing locations/industries
 - o Mobile factors but used intensively in import-competing locations/industries
- If trade increases demand for a factor, it generally benefits from trade
 - o Factors “stuck” in exporting locations/industries
 - o Mobile factors but used intensively in exporting locations/industries
- Trade benefits consumers via lowers prices of imported goods
 - o Some consumers may benefit more than others

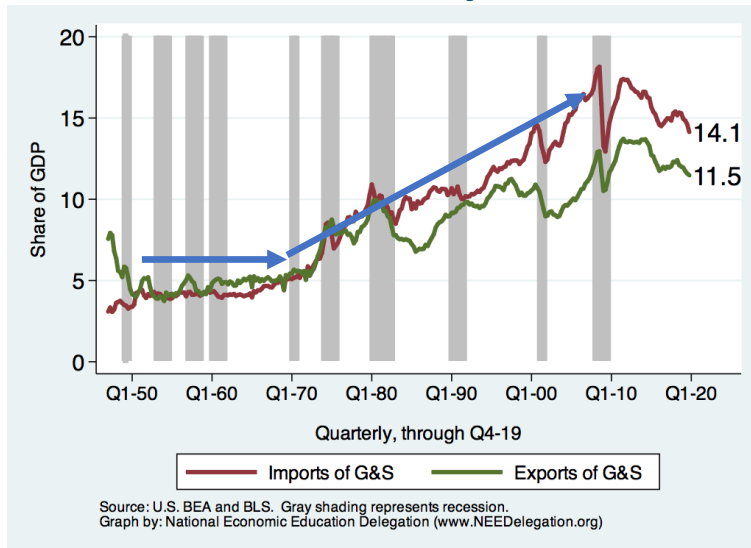
45

The Basic Issue: Inverted V of Jobs in Manuf.



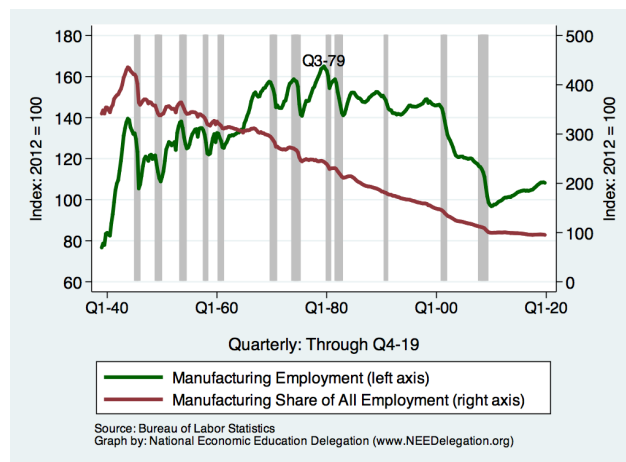
46

“International Trade is Surely a Contributor!”



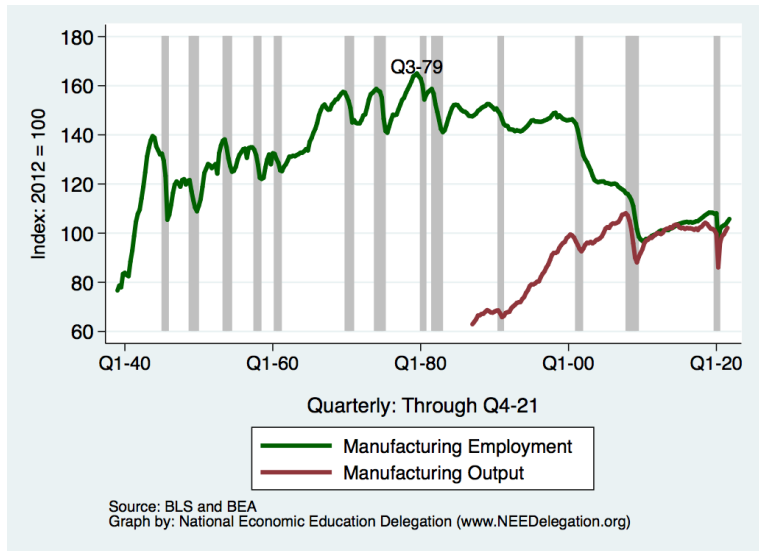
47

But There is No V in the Fraction of Jobs in Manufacturing

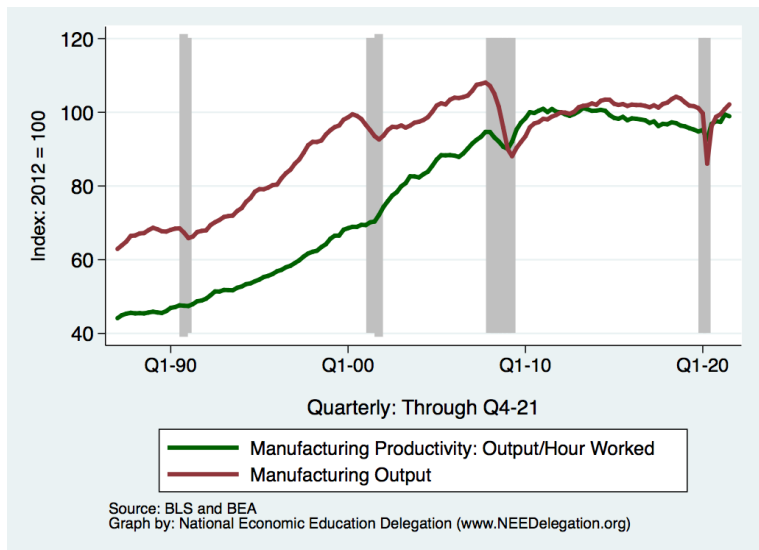


48

And Manufacturing Output Keeps on Growing

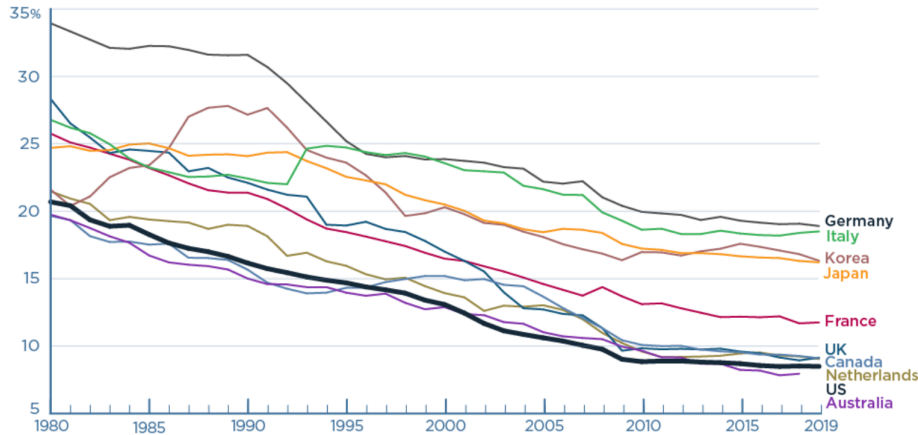


And Manufacturing Productivity is on the Rise



Manufacturing employment has been declining in all advanced economies for decades

Manufacturing employment as percent of total employment, 1980-2019



Another Problem: Trade Deficit in 2021

- **Massive Trade Deficit**

- 3.7% of US GDP
- \$859.1 billion (goods and services)
- \$1,090 billion (goods)

- **Massive Trade Deficit with China**

- \$355.3 billion (goods)

How to Think About the Trade Deficit

- A trade deficit is when:
 - VALUE of imports > VALUE of exports.

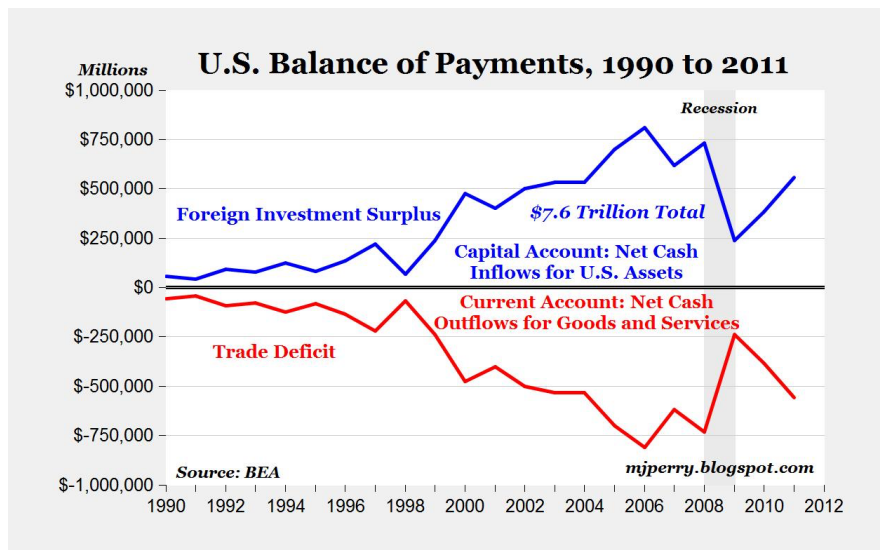
- Why does this happen?

- International transactions include:
 - Imports and exports of goods and services - Current Account
 - ALSO: imports and exports of assets (investments) - Capital Account

- The TRADE DEFICIT only looks at the Current Account

53

Trade and Investment Flows Balance Out



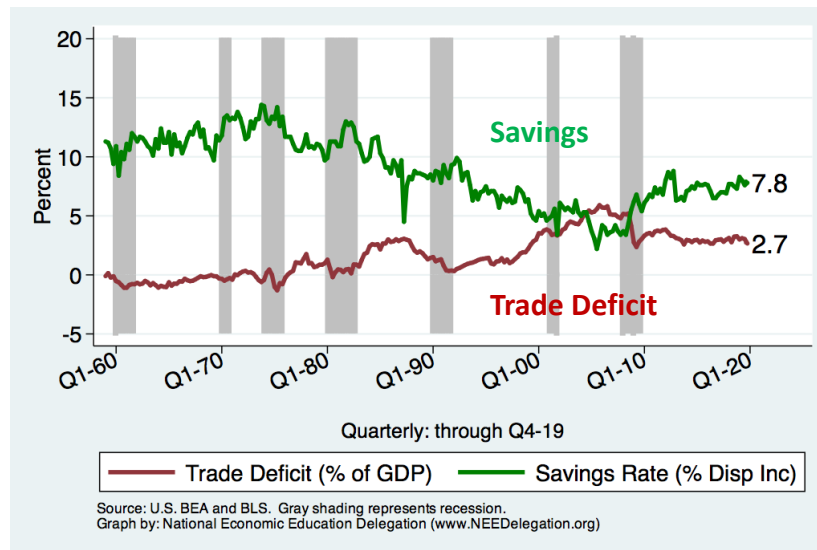
54

Balanced Budgets & Increased Savings

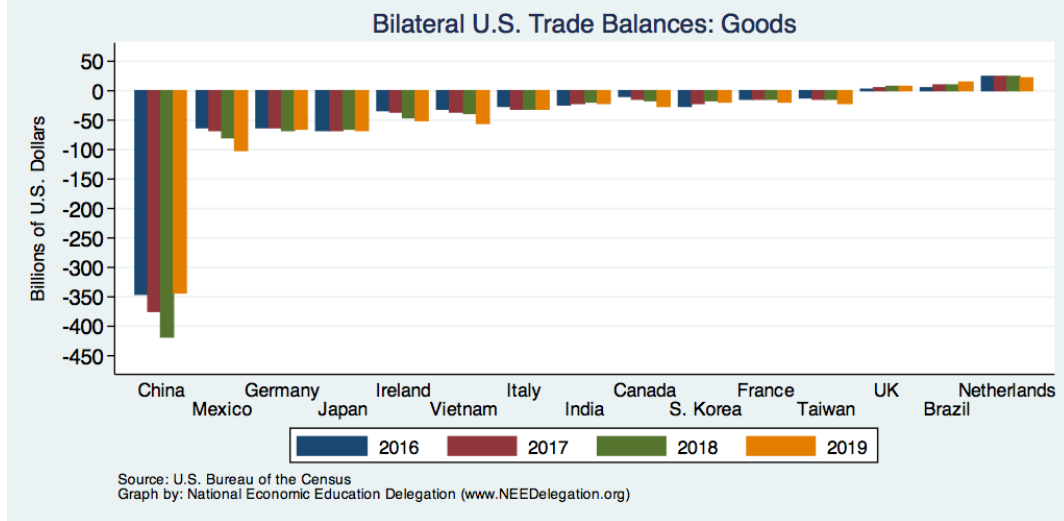
- Reducing federal borrowing would reduce pressure on trade deficits.
- More savings would mean more domestic investment and less borrowing from abroad.



US Savings and the Trade Deficit



Bilateral Trading Relationships



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Bilateral Trade Deficits are Unimportant

- **Natural result of an overall trade deficit.**
- **Likely result from specialization.**
- **Can be exaggerated by mismeasurement of bilateral trade flows.**
 - Value added vs total value
- **Are unlikely to be a result of foreign country's trade policies.**



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60

Summary

- Trade and growth are positively related.
- Gains from trade can be widespread (lower prices for consumers).
- Losses from trade can be highly concentrated.

Thank you!

Any Questions?

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