

PubPol/Econ 541

Class 0

Introduction & Overview of the International Economy

by

Alan V. Deardorff
University of Michigan
2023

Today

- Introduce ourselves
- Course Information
- Overview of the world economy
 - Far more slides than we'll get through
 - Look at them at your leisure, if you wish

Introductions

- Me:
 - I am Alan Deardorff
 - PhD in Economics from Cornell
 - Professor at UM since 1970
 - now retired - “Emeritus” – but still teaching this course
 - Call me “Alan”
 - If you are not comfortable with that, then Professor Deardorff
- You:

Introductions

- Keep your
 - microphone off when not speaking
 - video on always, if you are willing (email me if you prefer not to)
- Please answer the Survey in Canvas with the same information that I'm about to ask you to tell the class
 - Survey available now, under "Quizzes"
 - Due tomorrow midnight, for me to have by Wednesday's class
 - Available for a week

Introductions

- I'll now call on you to introduce yourself
 - Who you are,
 - What you want to be called,
 - What program and year you are in, (MPP, MAE, etc.)
 - Where you are from, and
 - Any particular questions (or answers) you have about international economics.

Pause for Introductions

Course Information

- Complete information is on my public website
 - Access <http://www-personal.umich.edu/~alandear/courses/541/541.html>
 - Or google “Deardorff”, then Courses / 541
 - Or use link from Canvas course page

Course Information

- Class format
 - Mix of lecture and discussion all live via Zoom
 - Lecture material will draw on PowerPoint slides
 - Available on website
 - Before and after
 - Discussion will mostly draw on Questions posted for each class
 - Via “Questions on Readings” on public course web site
 - Questions only, available well before class
 - Questions and Answers (Q&A) after Quiz on that material
 - Questions also linked on Syllabus

Course Information

- Communication:
 - Class will be synchronous via Zoom. DO ask questions
 - Raise hand (but I'm not sure I'll see it)
 - Interrupt with your voice
 - Regular Zoom office hours: MTh 10-11
 - Email: alandear@umich.edu
 - With questions, comments, etc.
 - To request a Zoom meeting

Course Information

- Survey:
 - Please complete the Getting-to-know-you survey
 - Find it under Quizzes in Canvas
 - Scroll way down
 - I wanted it by last night, but it is open through next Monday, Sep 4, and I need it from all of you

Course Information

- Requirements:
 - Weekly Quizzes (count only best 10)
 - 3 Papers (done in assigned groups)
 - Class participation
 - Questions, answers, and comments during class
 - News
 - We'll discuss, weekly
 - See tabulation on my website

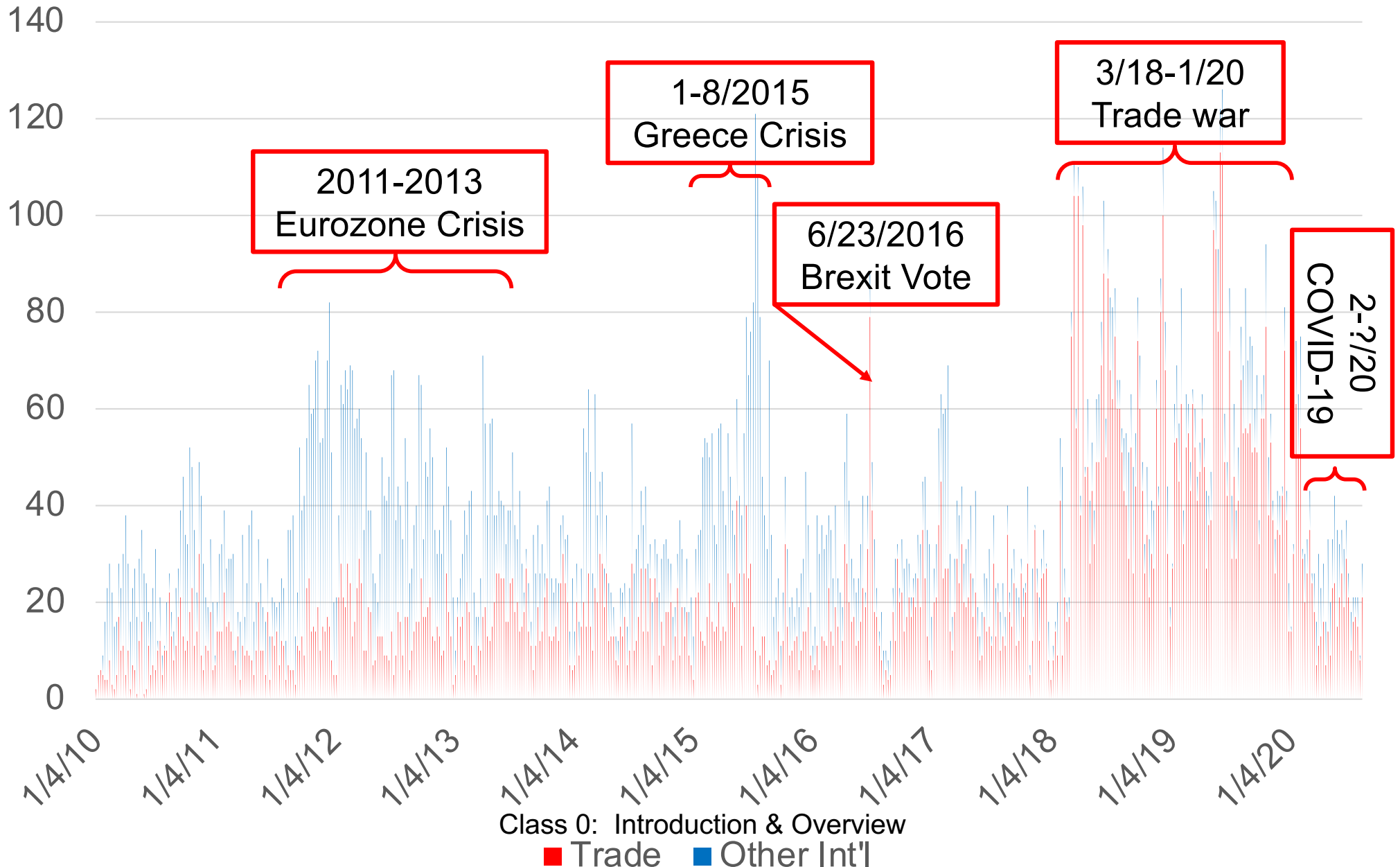
Links to Trade News

Search site for pages

 FEEDBACK[\(Click here for other International Economic News\)](#)

| Date | Topic | Author | Title | Public Source |
|--------------|-----------------------|-----------------|----------------------------------------------------------------------------|---------------------|
| Aug 19, 2022 | Taiwan-US trade talks | Swanson | "U.S. to Begin Formal Trade Talks With Taiwan" | NYT |
| Aug 19, 2022 | Australia gas exports | Winning & Hoyle | "Australia Considers Cutting Gas Exports, Further Straining Global Supply" | WSJ |
| Aug 18, 2022 | Taiwan-US trade talks | Hayashi | "U.S., Taiwan to Begin Formal Talks for Trade, Investment Pact This Fall" | WSJ |
| Aug 17, 2022 | Taiwan-US trade talks | Schwartz | "US and Taiwan to hold trade talks amid China tensions" | FT |
| Aug 16, 2022 | Russia-Turkey trade | FT reporters | "Surge in Turkish exports to Russia raises western fears of closer ties" | FT |
| Aug 15, 2022 | Brexit | Booth | "Brexit is Boris Johnson's singular achievement. How well is it working?" | WP |

Trade and other international economic news articles per week 2010-2020



Course Information

- Classroom Reserved
 - Room 1220 Weill Hall is reserved for your use during class times: MW 8:30-9:50
 - Feel free to bring your laptop there to attend class free of disruptions
 - You may meet other class members there in person. (Follow UM protocols for masking.)

Plan for Course

- Recent trade events (trade war, etc.)
- Tariff/quota analysis (needed for papers)
- Int'l macro (exchange rates, deficits)
- Institutions (international, national)
- Trade barriers (NTBs)
- Trade theory (General equilibrium)
- Uses & abuses (FTAs, remedies, sanctions)

Pause for Discussion

Questions

- Will you be taking PubPol 542, International Financial Policy?
- What would you most like to learn from this course?

Outline

- “Globalization”
- Trade
- Policies that Affect Others

“Globalization”

- Means different things to different people
 - My definitions (see my online Glossary):
 1. The increasing world-wide integration of markets for goods, services and capital.
 2. Also role of MNCs, IMF, WTO, World Bank.
 3. Elsewhere: domination by United States.
 - Some see good, others see bad

Outline

- “Globalization”
- Trade
- Policies that Affect Others

Country Interactions: Trade

- Trade (per CIA, 2021 est.)
 - World exports: \$28.1 trillion
(compare world GDP of \$134 trillion)
 - World trade has grown faster than world GDP most years
 - Declined with the world recession of 2008, then recovered
 - Slowed down in 2015-16, then resumed in 2017
 - Collapsed in 2020 with the pandemic
 - What's next? We don't know!

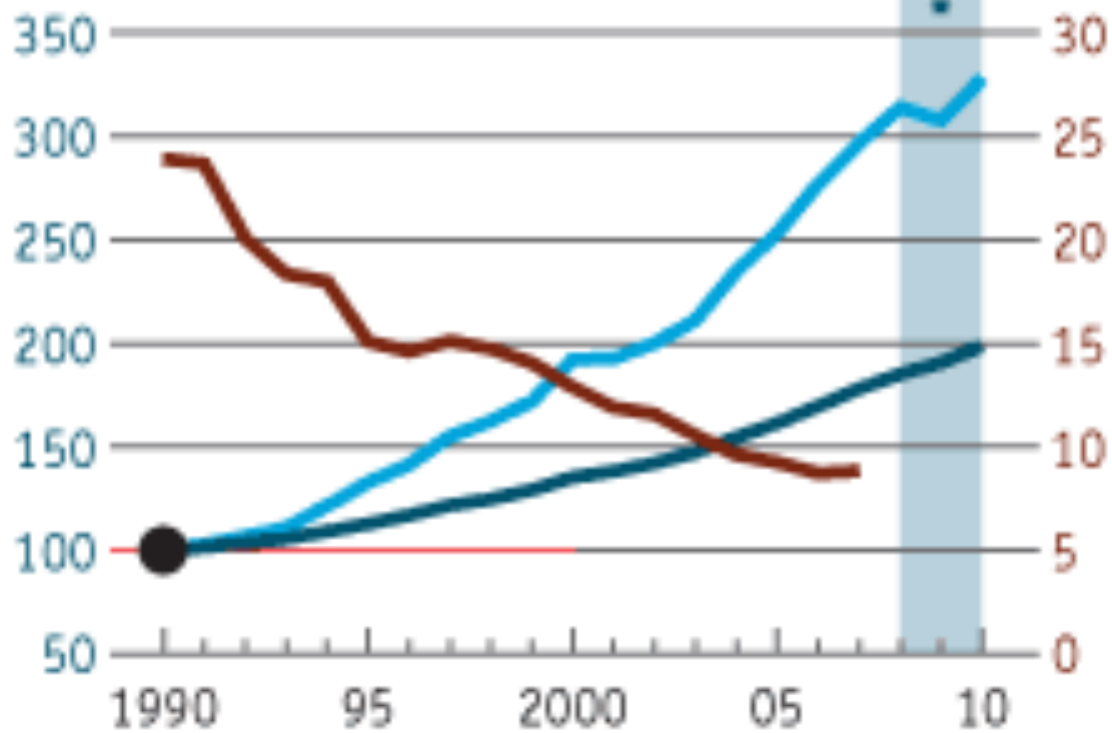
Golden years

Indices, 1990=100:

— world trade volume

— world GDP

Average tariff applied, %



Sources: World Bank; IMF

*Forecast

Export levels are now above their pre-pandemic peak

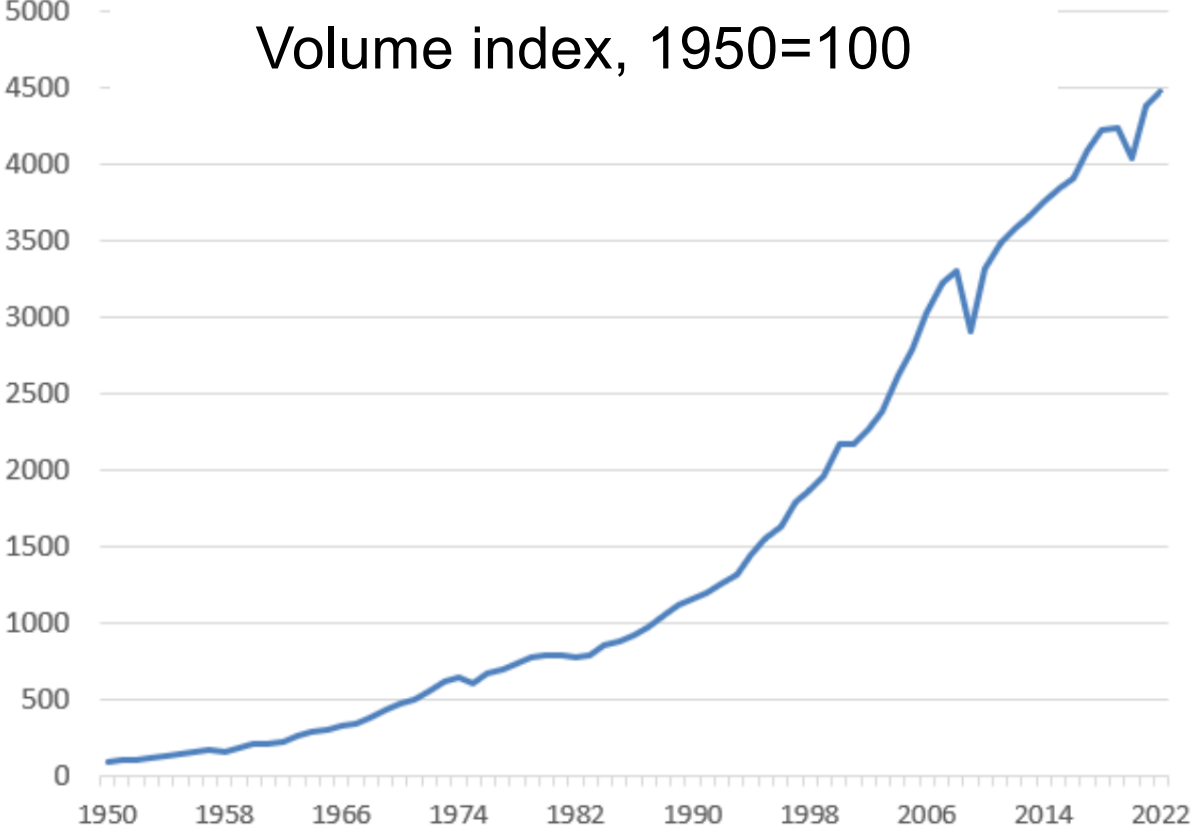
Merchandise world trade volumes, seasonally adjusted

— World trade (2010=100)



Source: FT 8/25/21

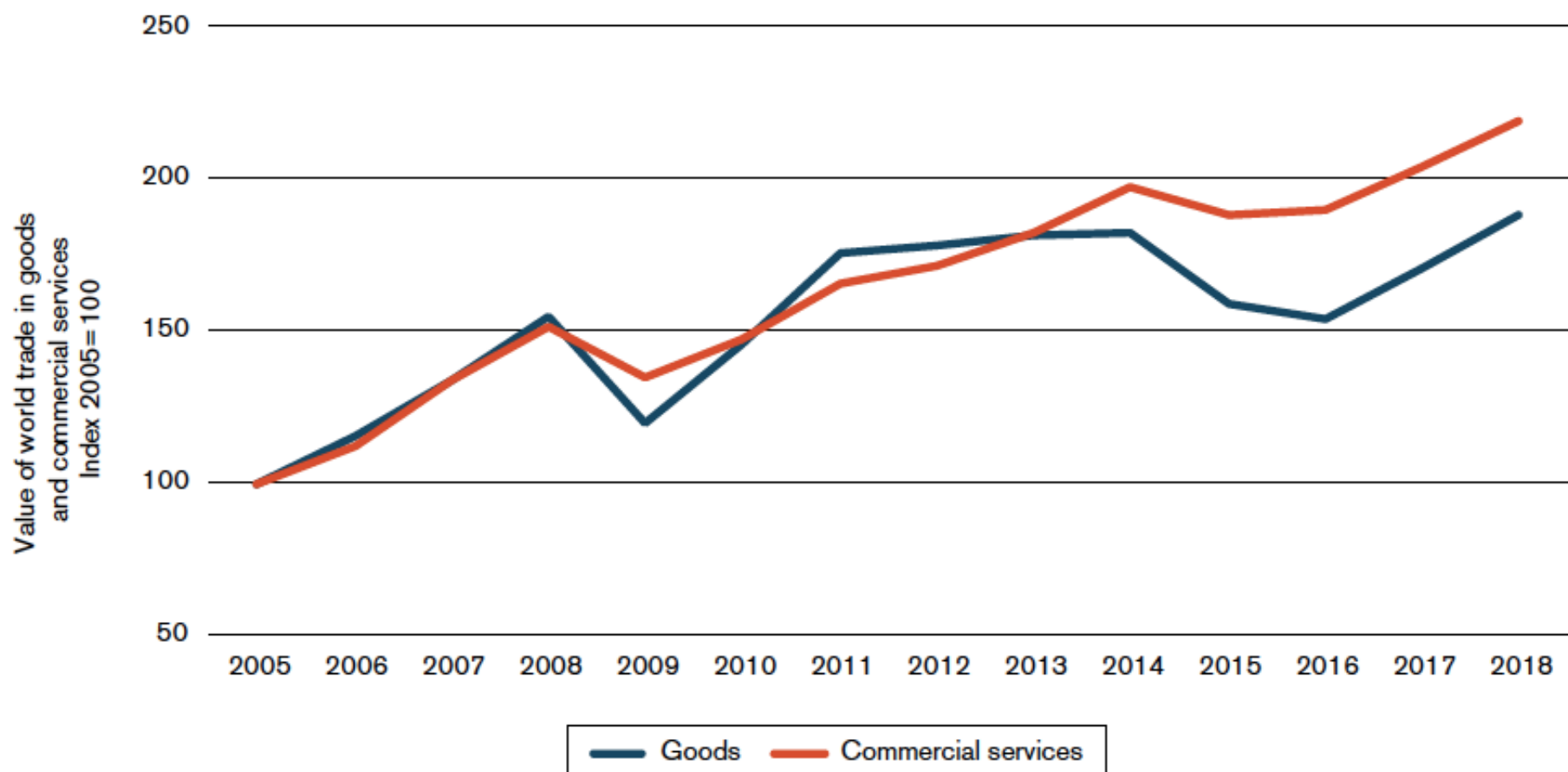
Evolution of World Trade, 1950-2022



Source: WTO

Figure A.1: Trade in goods has grown more slowly than trade in commercial services

Growth of world trade in goods and commercial services



Source: WTO-UNCTAD-ITC estimates.

Note: World trade is calculated as the average of world exports and world imports.

Pause for Discussion

Country Interactions: Trade

- See below for
 - Who trades most?
 - Who trades with whom?
 - Share of trade in GDP
 - US:
 - What do we export/import?
 - To/from whom?

Who Trades the Most?

(\$ b. & % share, 2020)

| Exporters | | | Importers | | |
|--------------|---------------|--------------|--------------|---------------|--------------|
| | Value | Share | | Value | Share |
| China | 2,591 | 14.7 | US | 2,408 | 13.5 |
| US | 1,432 | 8.1 | China | 2,056 | 11.5 |
| Germany | 1,380 | 7.8 | Germany | 1,171 | 6.6 |
| Netherlands | 641 | 3.8 | UK | 635 | 3.6 |
| Japan | 723 | 3.6 | Japan | 635 | 3.6 |
| World | 17,583 | 100.0 | World | 17,812 | 100.0 |

Source: WTO, World Trade Statistical Review, 2021, Table A6

Who Trades the Most?

(Excluding intra-EU-27)

(\$ b. & % share, 2018)

| Exporters | | | Importers | | |
|--------------|---------------|--------------|--------------|---------------|--------------|
| | Value | Share | | Value | Share |
| China | 2,591 | 18.1 | US | 2,408 | 16.5 |
| EU-27* | 2,209 | 15.4 | China | 2,056 | 14.0 |
| US | 1,432 | 10.0 | EU-27* | 1,958 | 13.4 |
| Japan | 641 | 4.5 | UK | 635 | 4.3 |
| Korea, S** | 512 | 3.6 | Japan | 635 | 4.3 |
| World | 14,334 | 100.0 | World | 14,634 | 100.0 |

*EU external only

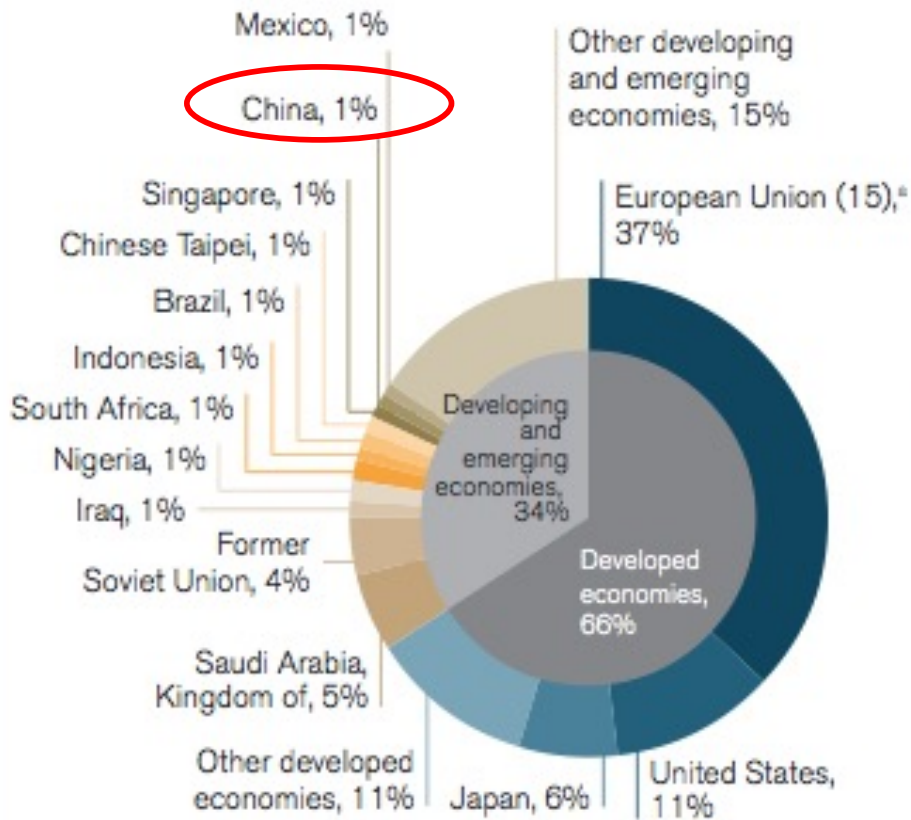
**Source has Hong Kong, China 549, but 513 is re-exports

Source: WTO, World Trade Statistical Review, 2021, Table A7

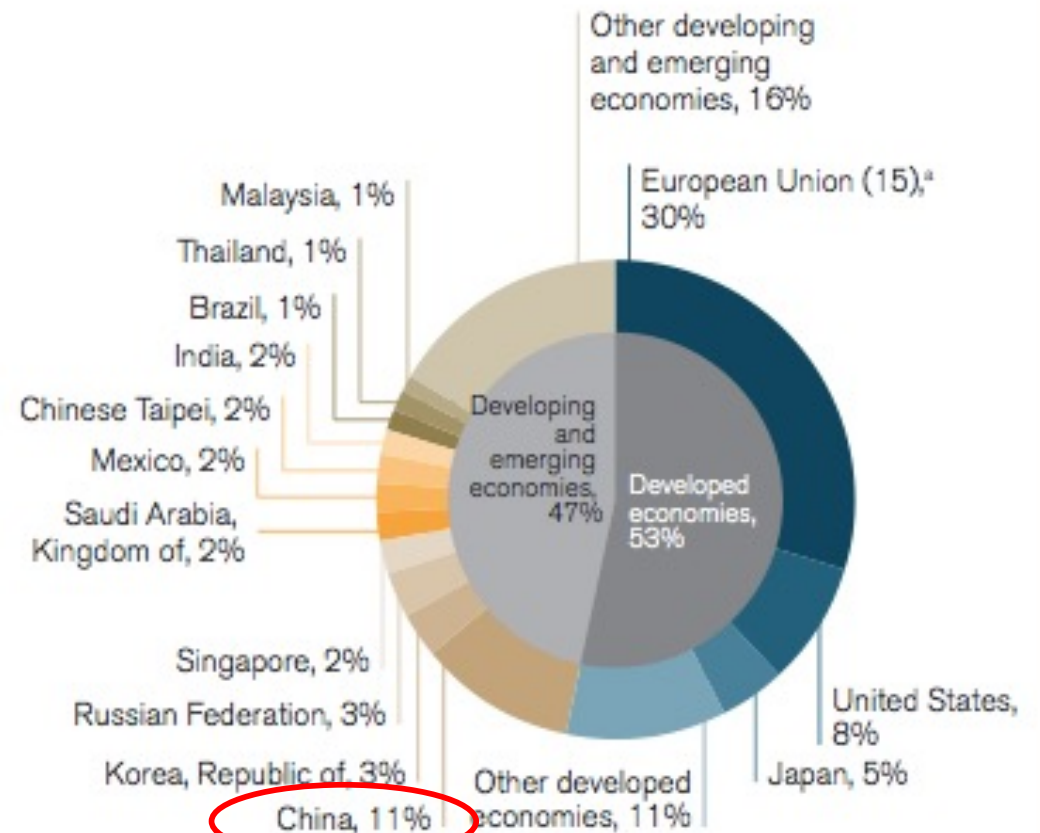
Merchandise Export Shares, 1980 to 2011

Figure B.5: Shares of selected economies in world merchandise exports by level of development, 1980-2011 (percentage)

1980



2011

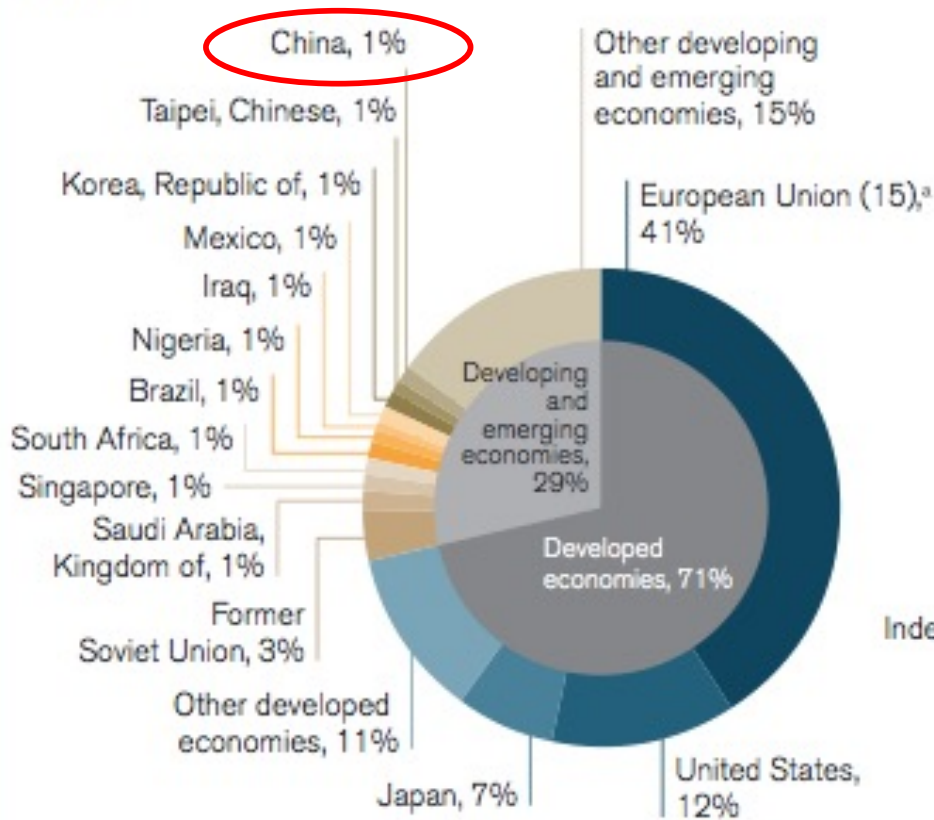


* Includes intra-EU trade.
Source: WTO Secretariat.

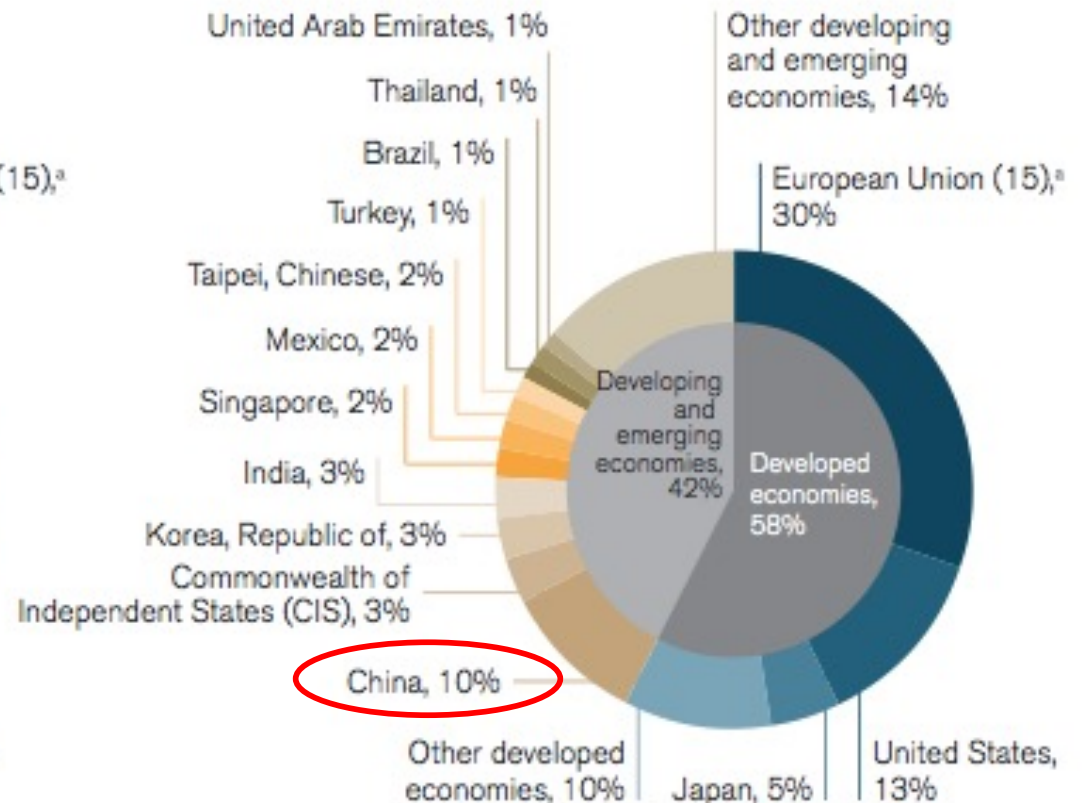
Merchandise Import Shares, 1980 to 2011

Figure B.6: Shares of selected economies in world merchandise imports by level of development, 1980-2011 (percentage)

1980



2011



^a Includes intra-EU trade.

Source: WTO Secretariat.

Table B.3: Leading merchandise exporters, 1980-2011
(US\$ billion and percentage)

| | 2011 | | | 1980 | |
|--------------------------|----------|------|----------------|------|----------------|
| | Value | Rank | Share in world | Rank | Share in world |
| World | 18,255.2 | - | 100.00 | - | 100.00 |
| China | 1,898.4 | 1 | 10.40 | 30 | 0.89 |
| United States | 1,480.4 | 2 | 8.11 | 1 | 11.09 |
| Germany ^a | 1,472.3 | 3 | 8.06 | 2 | 9.48 |
| Japan | 822.6 | 4 | 4.51 | 3 | 6.41 |
| Netherlands | 661.0 | 5 | 3.62 | 9 | 3.64 |
| France | 596.1 | 6 | 3.27 | 4 | 5.70 |
| Korea, Republic of | 555.2 | 7 | 3.04 | 32 | 0.86 |
| Italy | 523.2 | 8 | 2.87 | 7 | 3.84 |
| Russian Federation | 522.0 | 9 | 2.86 | - | - |
| Belgium ^b | 476.7 | 10 | 2.61 | 11 | 3.17 |
| United Kingdom | 473.2 | 11 | 2.59 | 5 | 5.41 |
| Hong Kong, China | 455.6 | 12 | 2.50 | 22 | 1.00 |
| Domestic exports | 16.8 | - | 0.09 | - | 0.67 |
| Re-exports | 438.8 | - | 2.40 | - | 0.33 |
| Canada | 452.4 | 13 | 2.48 | 10 | 3.33 |
| Singapore | 409.5 | 14 | 2.24 | 26 | 0.95 |
| Domestic exports | 223.9 | - | 1.23 | - | - |
| Re-exports | 185.6 | - | 1.02 | - | 0.33 |
| Saudi Arabia, Kingdom of | 364.7 | 15 | 2.00 | 6 | 5.36 |
| Mexico | 349.6 | 16 | 1.91 | 31 | 0.89 |

Table B.4: Leading merchandise importers, 1980-2011
(US\$ billion and percentage)

| | 2011 | | | 1980 | |
|----------------------|----------|------|----------------|------|----------------|
| | Value | Rank | Share in world | Rank | Share in world |
| World | 18,437.7 | - | 100.00 | - | 100.00 |
| United States | 2,265.9 | 1 | 12.29 | 1 | 12.38 |
| China | 1,743.5 | 2 | 9.46 | 22 | 0.96 |
| Germany ^a | 1,253.9 | 3 | 6.80 | 2 | 9.06 |
| Japan | 855.0 | 4 | 4.64 | 3 | 6.81 |
| France | 713.9 | 5 | 3.87 | 4 | 6.50 |
| United Kingdom | 637.8 | 6 | 3.46 | 5 | 5.57 |
| Netherlands | 598.7 | 7 | 3.25 | 7 | 3.76 |
| Italy | 557.5 | 8 | 3.02 | 6 | 4.85 |
| Korea, Republic of | 524.4 | 9 | 2.84 | 20 | 1.07 |
| Hong Kong, China | 510.9 | 10 | 2.77 | 18 | 1.11 |
| Retained imports | 130.2 | - | 0.71 | - | 0.79 |
| Canada | 462.6 | 11 | 2.51 | 10 | 3.01 |
| India | 462.6 | 12 | 2.51 | 33 | 0.72 |
| Belgium ^b | 461.4 | 13 | 2.50 | 8 | 3.46 |
| Spain | 374.2 | 14 | 2.03 | 12 | 1.64 |
| Singapore | 365.8 | 15 | 1.98 | 17 | 1.16 |
| Retained imports | 180.2 | - | 0.98 | - | 0.83 |
| Mexico | 361.1 | 16 | 1.96 | 21 | 1.07 |
| Russian Federation | 323.8 | 17 | 1.76 | - | - |
| Taipei, Chinese | 281.4 | 18 | 1.53 | 23 | 0.95 |
| | 243.7 | 19 | 1.32 | 19 | 1.08 |

Table B.5: Leading exporters of commercial services, 1980-2011
(US\$ billion and percentage)

| | 2011 | | | 1980 | |
|----------------------|---------|------|--------|------|--------|
| | Value | Rank | Share | Rank | Share |
| World | 4,168.8 | - | 100.00 | - | 100.00 |
| United States | 580.9 | 1 | 13.93 | 2 | 10.38 |
| United Kingdom | 273.7 | 2 | 6.57 | 3 | 9.34 |
| Germany ^a | 253.4 | 3 | 6.08 | 4 | 7.57 |
| China | 182.4 | 4 | 4.38 | 31 | 0.55 |
| France | 166.6 | 5 | 4.00 | 1 | 11.48 |
| Japan | 142.5 | 6 | 3.42 | 6 | 5.11 |
| Spain | 140.3 | 7 | 3.37 | 9 | 3.12 |
| India | 136.6 | 8 | 3.28 | 25 | 0.78 |
| Netherlands | 133.5 | 9 | 3.20 | 7 | 4.55 |
| Singapore | 128.9 | 10 | 3.09 | 17 | 1.30 |
| Hong Kong, China | 121.4 | 11 | 2.91 | 15 | 1.60 |
| Ireland | 109.4 | 12 | 2.62 | 38 | 0.36 |
| Italy | 105.2 | 13 | 2.52 | 5 | 5.13 |
| Switzerland | 94.3 | 14 | 2.26 | 14 | 1.88 |
| Korea, Republic of | 93.8 | 15 | 2.25 | 18 | 1.29 |
| Belgium ^b | 87.3 | 16 | 2.10 | 8 | 3.13 |
| Sweden | 76.0 | 17 | 1.82 | 12 | 2.01 |
| Canada | 74.5 | 18 | 1.79 | 13 | 1.94 |
| Luxembourg | 72.5 | 19 | 1.74 | - | - |
| Denmark | 64.8 | 20 | 1.55 | 19 | 1.28 |
| Austria | 61.2 | 21 | 1.47 | 10 | 2.35 |
| | 53.3 | 22 | 1.28 | - | - |

Table B.6: Leading importers of commercial services, 1980-2011
(US\$ billion and percentage)

| | 2011 | | | 1980 | |
|----------------------|---------|------|--------|------|--------|
| | Value | Rank | Share | Rank | Share |
| World | 3,953.0 | - | 100.00 | - | 100.00 |
| United States | 395.3 | 1 | 10.00 | 4 | 7.16 |
| Germany ^a | 289.1 | 2 | 7.31 | 1 | 10.73 |
| China | 236.5 | 3 | 5.98 | 41 | 0.51 |
| United Kingdom | 170.4 | 4 | 4.31 | 5 | 6.25 |
| Japan | 165.8 | 5 | 4.19 | 2 | 7.95 |
| France | 143.5 | 6 | 3.63 | 3 | 7.69 |
| India | 123.7 | 7 | 3.13 | 30 | 0.72 |
| Netherlands | 118.2 | 8 | 2.99 | 6 | 4.40 |
| Ireland | 114.3 | 9 | 2.89 | 47 | 0.39 |
| Italy | 114.0 | 10 | 2.88 | 7 | 3.89 |
| Singapore | 113.8 | 11 | 2.88 | 31 | 0.72 |
| Canada | 99.8 | 12 | 2.53 | 10 | 2.50 |
| Korea, Republic of | 98.2 | 13 | 2.49 | 27 | 0.89 |
| Spain | 93.2 | 14 | 2.36 | 17 | 1.34 |
| Russian Federation | 87.9 | 15 | 2.22 | - | - |
| Belgium ^b | 84.6 | 16 | 2.14 | 9 | 3.07 |
| Brazil | 73.1 | 17 | 1.85 | 23 | 1.10 |
| Australia | 59.5 | 18 | 1.51 | 14 | 1.57 |
| Denmark | 56.1 | 19 | 1.42 | 28 | 0.86 |
| Hong Kong, China | 55.7 | 20 | 1.41 | 25 | 1.00 |
| Sweden | 55.6 | 21 | 1.41 | 11 | 1.72 |
| | 55.0 | 22 | 1.39 | 8 | 3.66 |

**Appendix Table 5: Leading exporters and importers of commercial services, 2014
(billion US\$ and per cent)**

| Rank | Exporters | Value | Share | Annual per cent change | Rank | Importers | Value | Share | Annual per cent change |
|------|----------------|-------|-------|------------------------|------|----------------|-------|-------|------------------------|
| 1 | United States | 686 | 14.1 | 3 | 1 | United States | 454 | 9.6 | 4 |
| 2 | United Kingdom | 329 | 6.8 | 4 | 2 | China | 382 | 8.1 | 16 |
| 3 | Germany | 267 | 5.5 | 5 | 3 | Germany | 327 | 6.9 | 1 |
| 4 | France | 263 | 5.4 | 4 | 4 | France | 244 | 5.1 | 6 |
| 5 | China | 222 | 4.6 | 8 | 5 | Japan | 190 | 4.0 | 12 |
| 6 | Japan | 158 | 3.3 | 19 | 6 | United Kingdom | 189 | 4.0 | -1 |
| 7 | Netherlands | 156 | 3.2 | 11 | 7 | Netherlands | 165 | 3.5 | 8 |
| 8 | India | 154 | 3.2 | 4 | 8 | Ireland | 142 | 3.0 | 16 |
| 9 | Spain | 135 | 2.8 | 5 | 9 | Singapore | 130 | 2.7 | 0 |
| 10 | Ireland | 133 | 2.7 | 9 | 10 | India | 124 | 2.6 | -1 |

Importance of Trade for Countries?

(GDP in US\$ b., Exports % of GDP,
Selected countries, 2017)

| | Exports | Exports/GDP |
|---------------|----------------|--------------------|
| United States | 2,377 | 11% |
| Japan | 1,084 | |
| Germany | 2,004 | |
| Canada | 619 | |
| India | 572 | |
| Mexico | 492 | |
| Netherlands | 858 | |
| Singapore | 627 | |
| Philippines | 1311 | |
| Nepal | 0.8 | |

Source: CIA World Fact Book

Importance of Trade for Countries?

A Few More of Interest

| | GDP | Exports/GDP |
|---------------------|------------|--------------------|
| China | 2,490 | 17% |
| Hong Kong | 569 | |
| Korea, South | 684 | |
| Korea, North (2013) | 3.0 | |
| Burma | 16.3 | |
| Israel | 105 | |

Source: CIA World Fact Book

Who Trades with Whom?

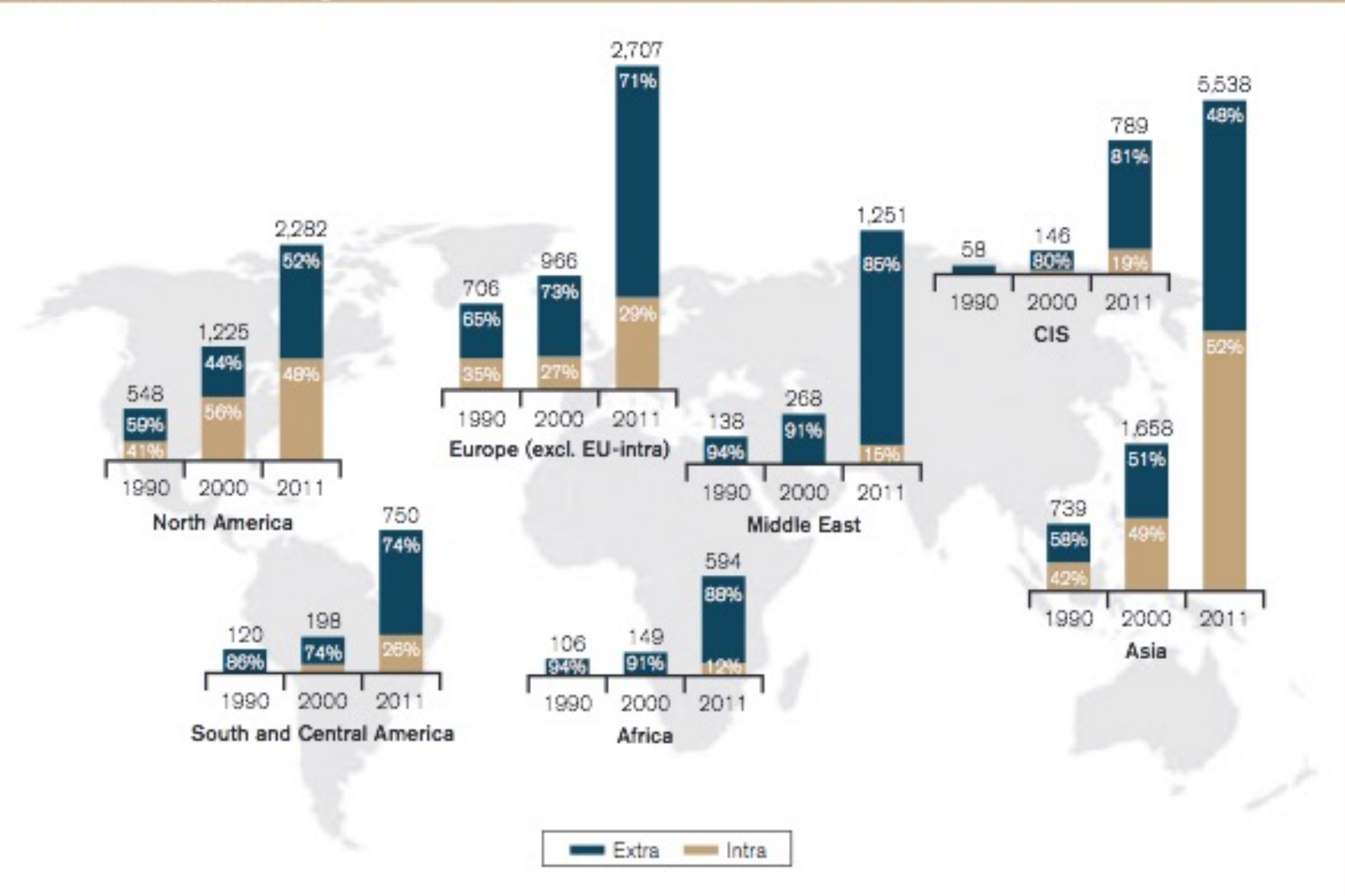
(\$ b., 2014, Intra- and inter-regional merchandise trade)

| | Destination: | | | | | |
|--------------|--------------|-------------|------|------|--------|-------|
| Origin: | North Amer. | Latin Amer. | Eur. | Asia | Africa | Other |
| North Amer. | 1251 | 214 | 379 | 504 | 43 | 97 |
| Latin Amer. | 173 | 179 | 114 | 170 | 18 | 26 |
| Europe | 540 | 119 | 4665 | 738 | 221 | 447 |
| Asia | 1065 | 185 | 900 | 3093 | 207 | 428 |
| Africa | 39 | 29 | 201 | 152 | 98 | 20 |
| Other | 128 | 18 | 532 | 828 | 51 | 273 |
| World | 3195 | 744 | 6792 | 5485 | 639 | 1292 |

Source: WTO, International Trade Statistics, 2015, Table I.4

Note: This source is no longer published, and its replacement lacks these data.

Figure B.14: Intra-regional and extra-regional merchandise exports of WTO regions, 1990-2011 (US\$ billion and percentage)



Sources: WTO *International Trade Statistics 2012*, supplemented with Secretariat estimates prior to 2000.

Note: Graphs for regions are not shown to scale. Colours and boundaries do not imply any judgement on the part of the WTO as to the legal status of any frontier or territory.

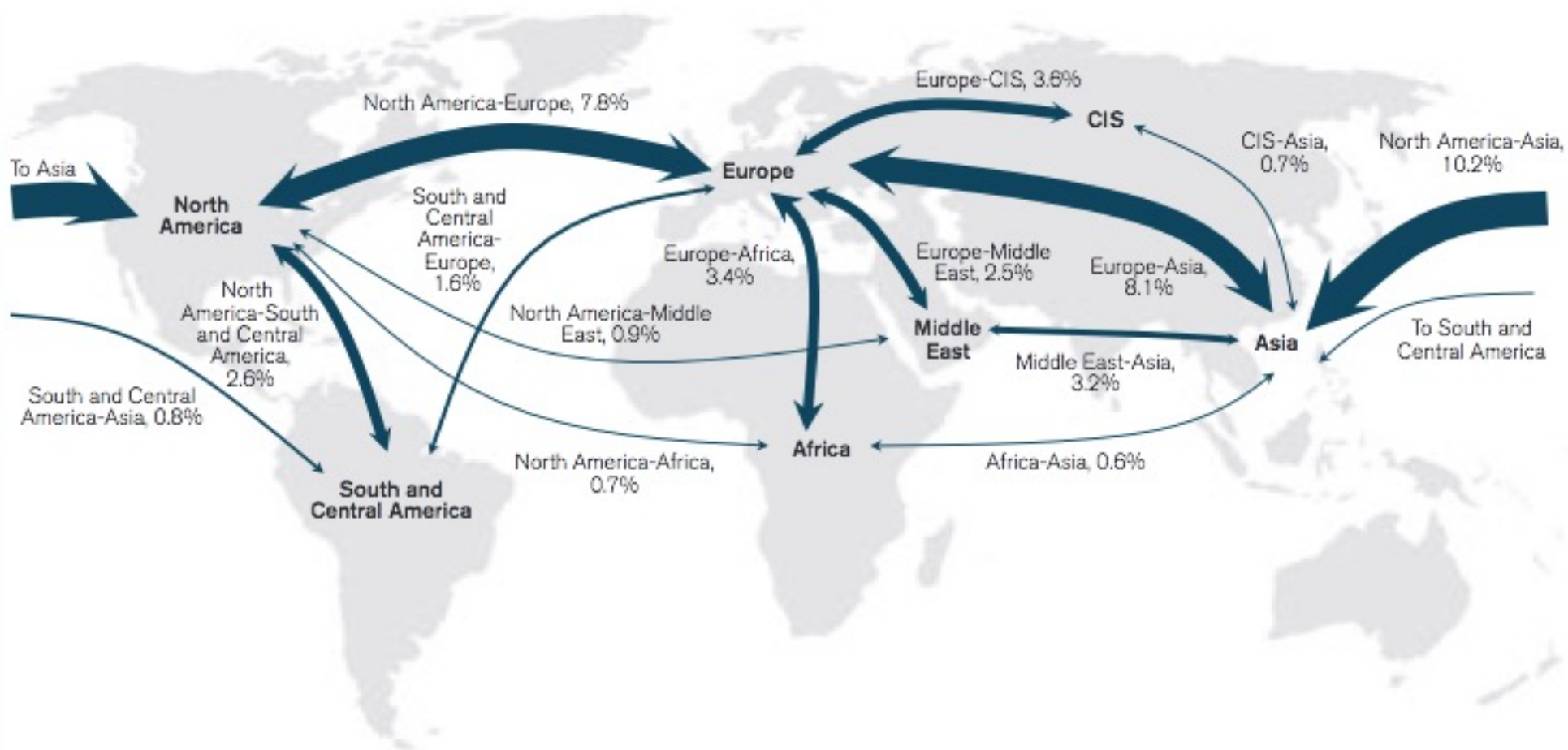
of Intra-Industry Trade



Table B.8: Average Grubel-Lloyd indices across sectors for selected economies, 1996-2011
(Index, 0-1)

| | 1996 | | | 2011 | | |
|---------------------------|-------|-----------|------------|-------|-----------|------------|
| | World | Developed | Developing | World | Developed | Developing |
| Hong Kong, China | 0.70 | 0.29 | 0.65 | 0.66 | 0.30 | 0.61 |
| Singapore | 0.65 | 0.31 | 0.60 | 0.65 | 0.38 | 0.59 |
| United States | 0.61 | 0.65 | 0.47 | 0.62 | 0.68 | 0.51 |
| European Union (27) | - | - | - | 0.60 | 0.63 | 0.51 |
| Malaysia | 0.43 | 0.28 | 0.51 | 0.55 | 0.37 | 0.58 |
| Canada | 0.57 | 0.59 | 0.36 | 0.53 | 0.58 | 0.34 |
| Switzerland | 0.51 | 0.52 | 0.31 | 0.49 | 0.49 | 0.37 |
| Thailand | 0.36 | 0.26 | 0.44 | 0.49 | 0.38 | 0.53 |
| Mexico | 0.50 | 0.47 | 0.42 | 0.49 | 0.46 | 0.38 |
| Korea, Republic of | 0.42 | 0.35 | 0.35 | 0.48 | 0.43 | 0.42 |
| Taipei, Chinese | 0.44 | 0.34 | 0.38 | 0.48 | 0.40 | 0.48 |
| India | 0.34 | 0.30 | 0.34 | 0.44 | 0.39 | 0.43 |
| Ukraine | 0.43 | 0.30 | 0.44 | 0.43 | 0.27 | 0.44 |
| South Africa ^a | 0.41 | 0.31 | 0.44 | 0.41 | 0.30 | 0.44 |
| Brazil | 0.43 | 0.32 | 0.43 | 0.41 | 0.33 | 0.43 |
| China | 0.39 | 0.33 | 0.40 | 0.40 | 0.38 | 0.36 |
| Panama | 0.12 | 0.08 | 0.13 | 0.39 | 0.12 | 0.47 |
| Turkey | 0.32 | 0.27 | 0.36 | 0.39 | 0.36 | 0.41 |
| Japan | 0.35 | 0.34 | 0.32 | 0.39 | 0.36 | 0.39 |

Figure B.15.A: Share of total trade between geographic regions in world trade, 1990 (percentage)



Source: WTO Secretariat estimates.

Note: World trade includes intra-EU trade. Arrow weights based on shares in 1990. Trade within regions and with unspecified destinations represented 53% of world trade in 1990.

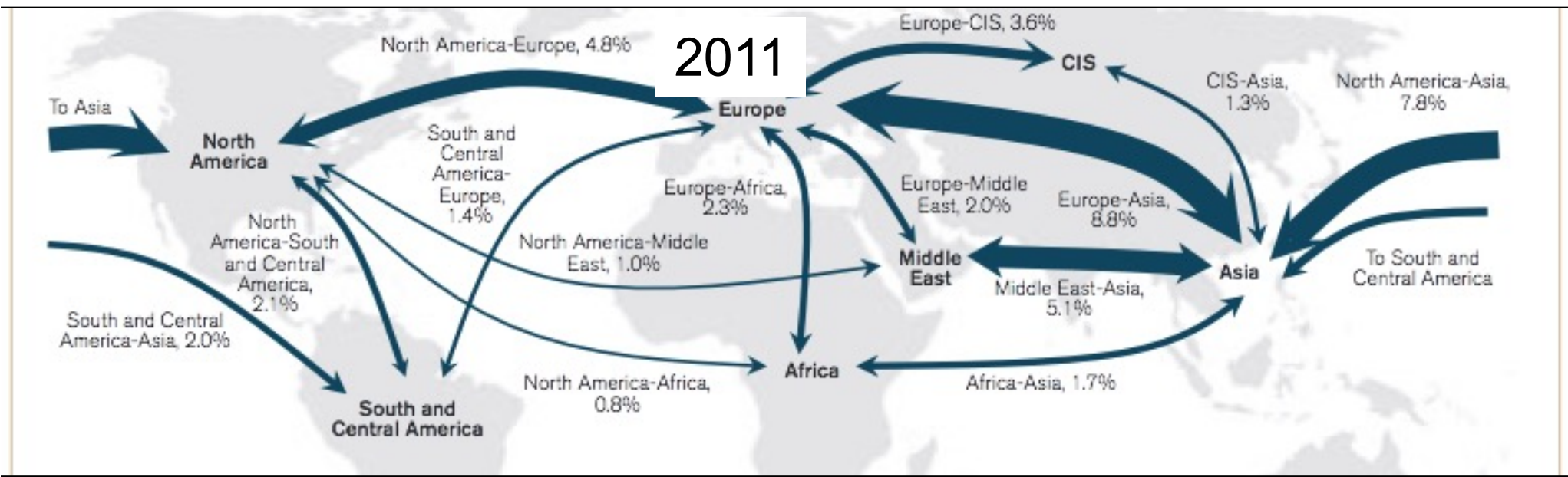
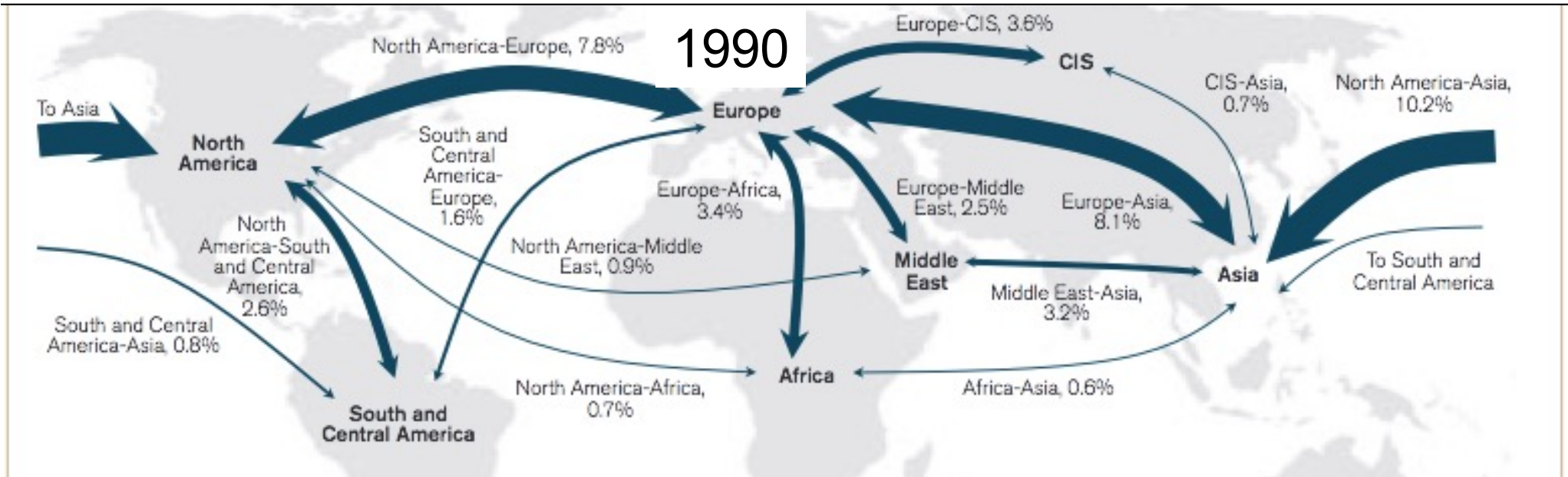
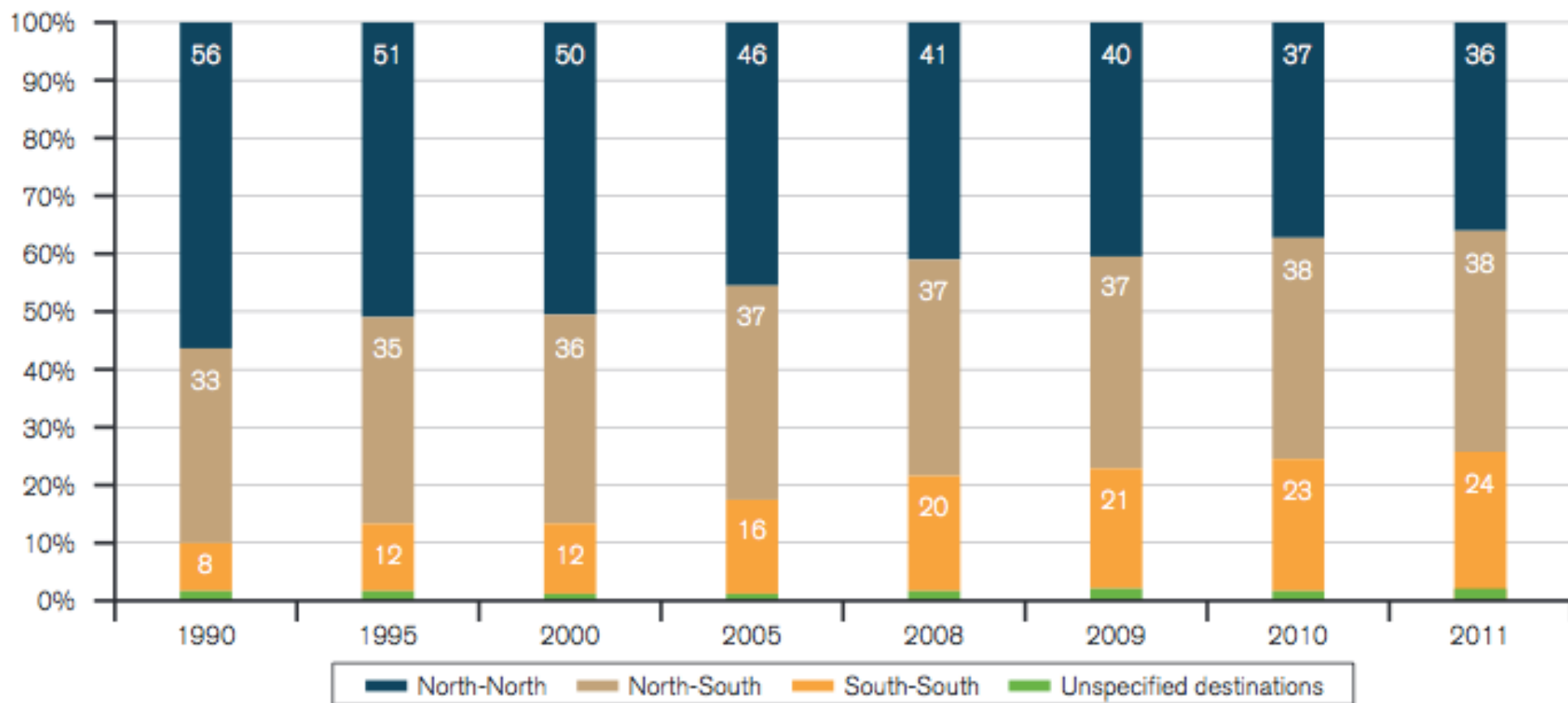


Figure B.8: Shares of “North-North”, “North-South” and “South-South” trade in world merchandise exports, 1990-2011
(percentage share)



Source: WTO Secretariat.

Note: South includes Central and Eastern Europe before 2000, equal to 1.6 per cent of world trade in 1995.

Pause for Discussion

Questions

- Why do you think international trade has grown so much faster than the world economy?
- Why has that growth slowed down in recent years?
- How do you think public attitudes (or your own) about globalization have changed in recent years?

What Does the World Trade?

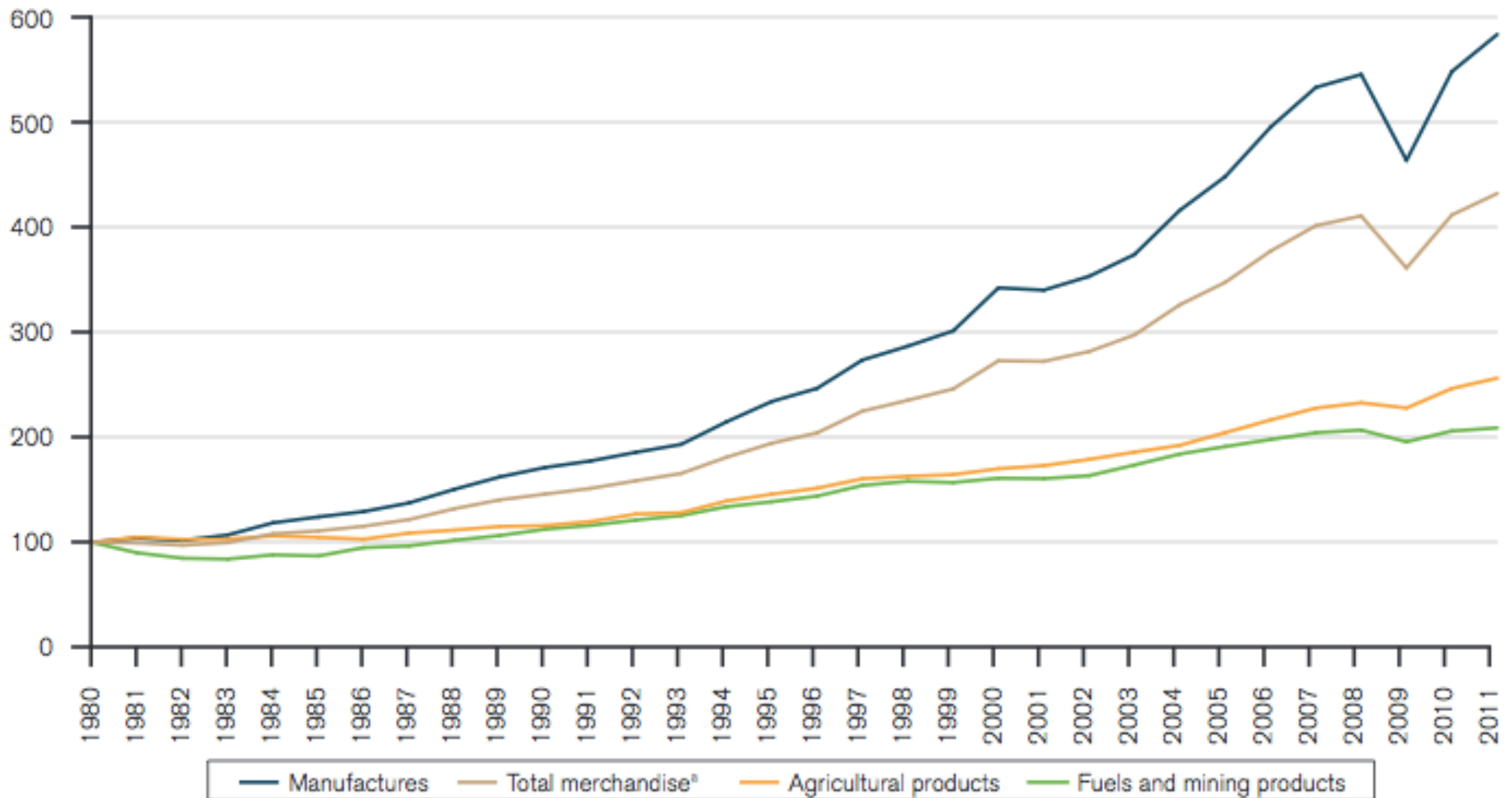
(\$ b. 2014 merchandise exports)

| | Value |
|----------------|--------|
| All Products | 17,797 |
| Agriculture | 1,765 |
| Fuels & Mining | 3,789 |
| Manuf. | 12,243 |

Source: WTO, International Trade Statistics, 2015, Table II.1

Note: This source is no longer published, and its replacement lacks these data.

Figure B.11: Volume of world merchandise exports by major product category, 1980-2011
(index, 1980=100)

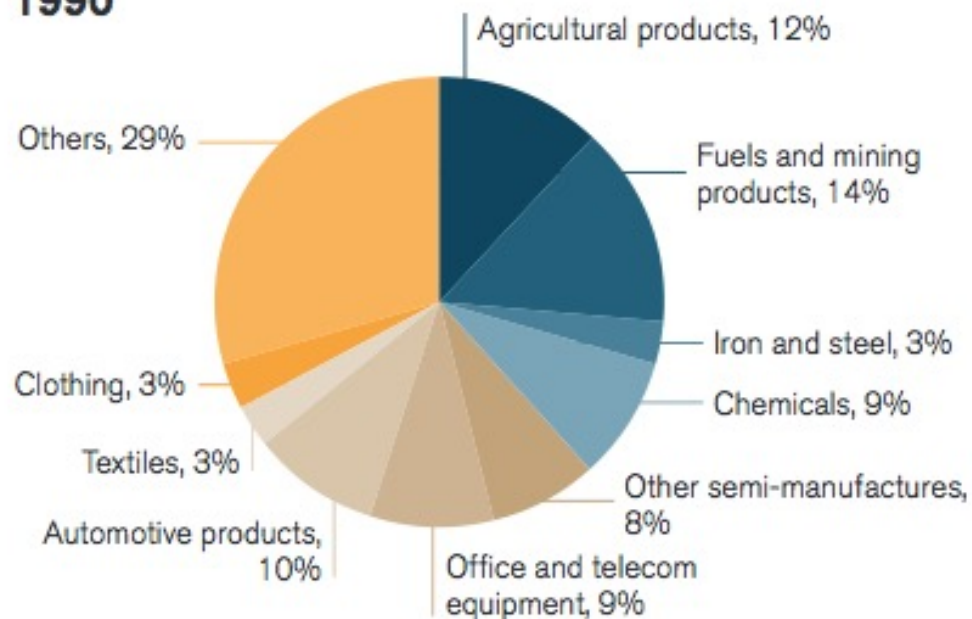


^a Includes unspecified products.

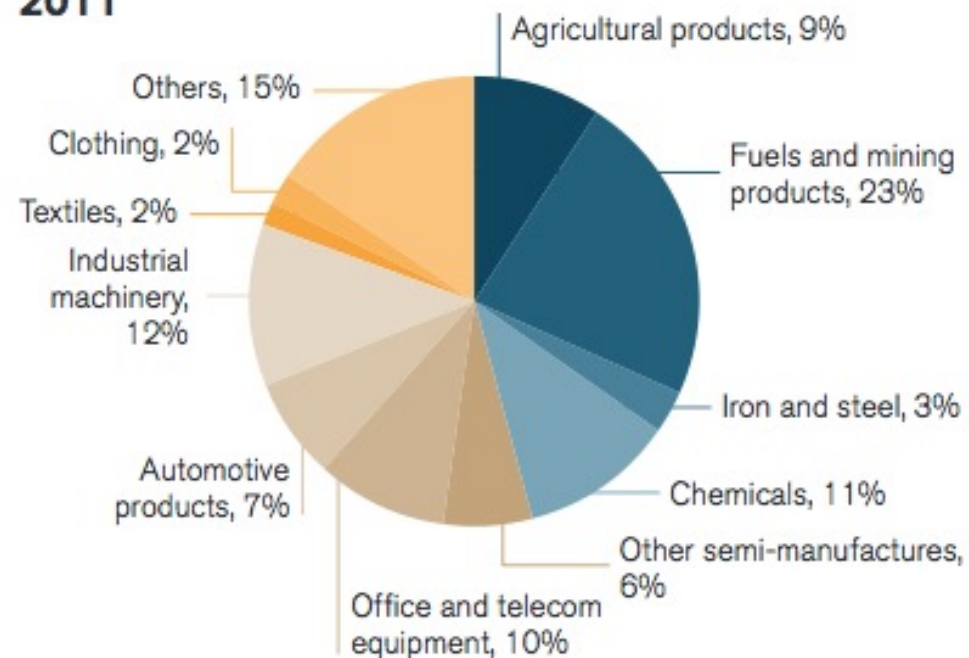
Source: WTO Secretariat.

Figure B.10: Shares in world merchandise exports by product, 1990-2011 (percentage)

1990



2011



Source: WTO Secretariat.

~~Did~~ (Not available since 2011)

What Does the US Trade?

(\$ b. 2011)

| | | Exports | Imports |
|--------------------------|----------------------------------------------------------------------------|----------------|----------------|
| Total | This is dated. US now exports more oil than it imports. | 1,497.4 | 2,235.8 |
| Agriculture | | 140.0 | |
| Petroleum | | | 462.3 |
| Industrial supplies | | 496.4 | 319.8 |
| Capital goods, exc. auto | | 493.2 | 513.4 |
| Automotive | | 133.1 | 255.2 |
| Other non-ag | | 234.6 | |
| Other non-petrol | | | 685.1 |

Source: Economic Report of the President, Feb 2013, Table B-104.

U.S. Imports & Exports

2019

IMPORTS \$3.1 trillion

EXPORTS \$2.5 trillion



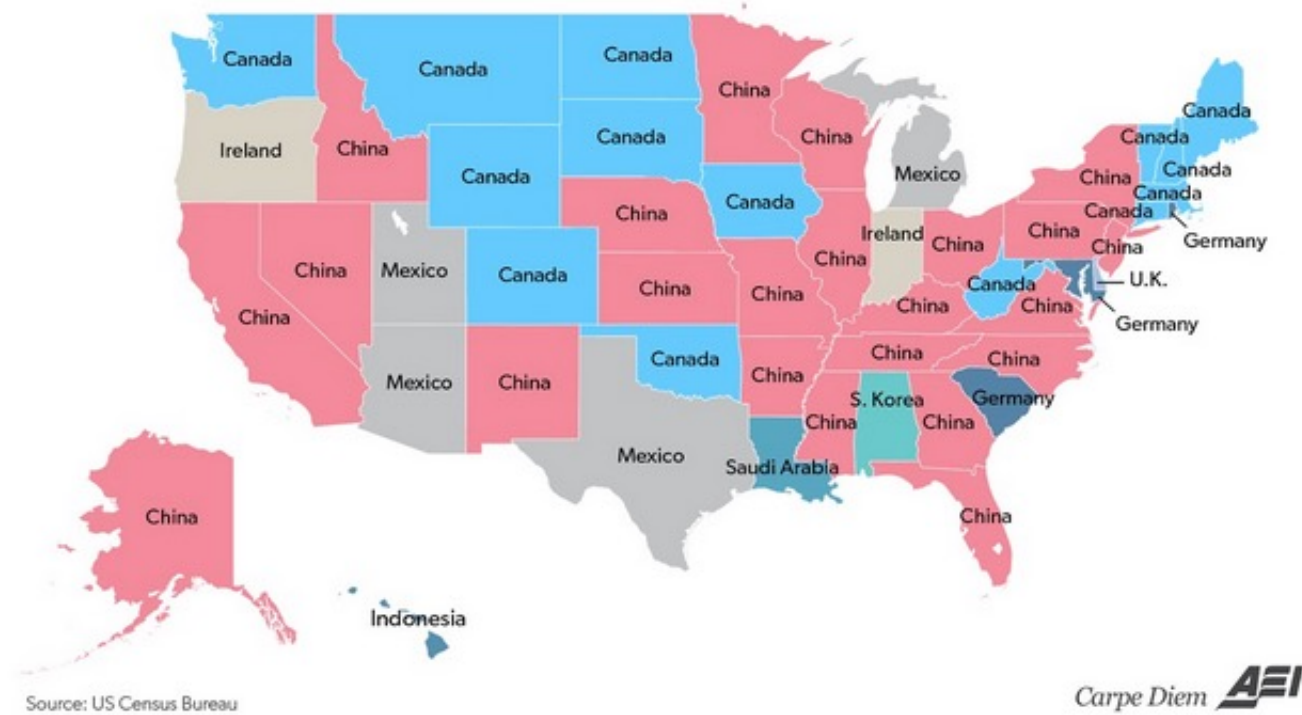
What Does the US Trade?

- US imports are much larger than US exports
- US is a big...
 - Exporter of agricultural products
 - Exporter and importer of
 - oil
 - capital goods (i.e., machines for making things)

Trade of US States

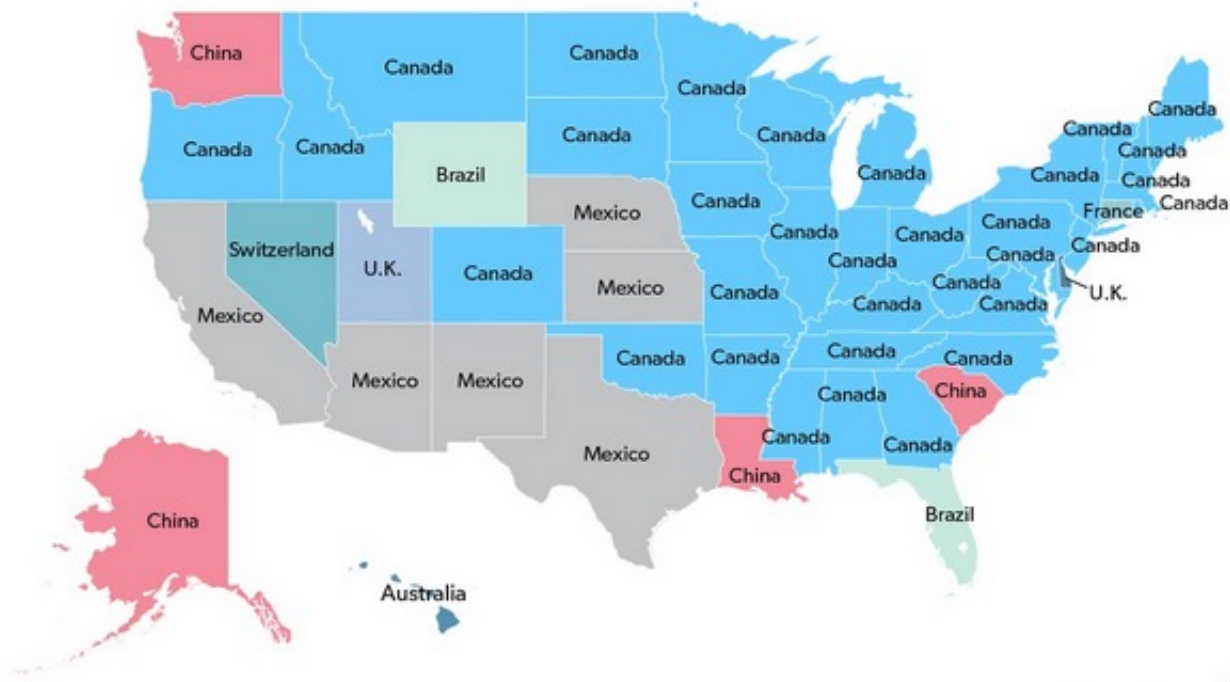
- US states differ substantially in the importance of international trade to them

Top Import Country for Each U.S. State (2016)



Source: Perry and Balliou (2017)

Top Export Country for Each U.S. State (2016)

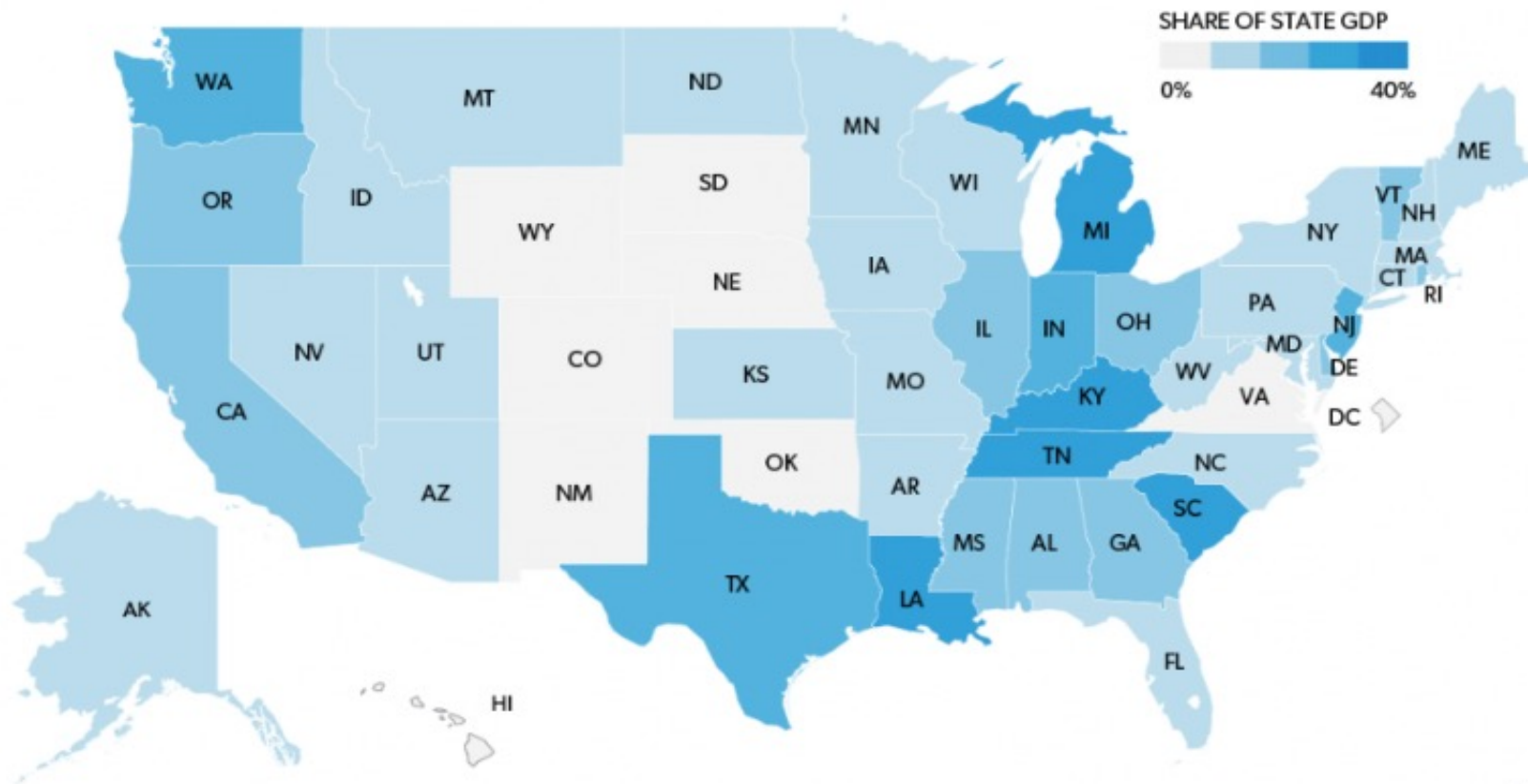


Source: US Census Bureau

Carpe Diem **AEI**

Source: Perry and Balliou (2017)

International Trade as a Share of State GDP (2016)

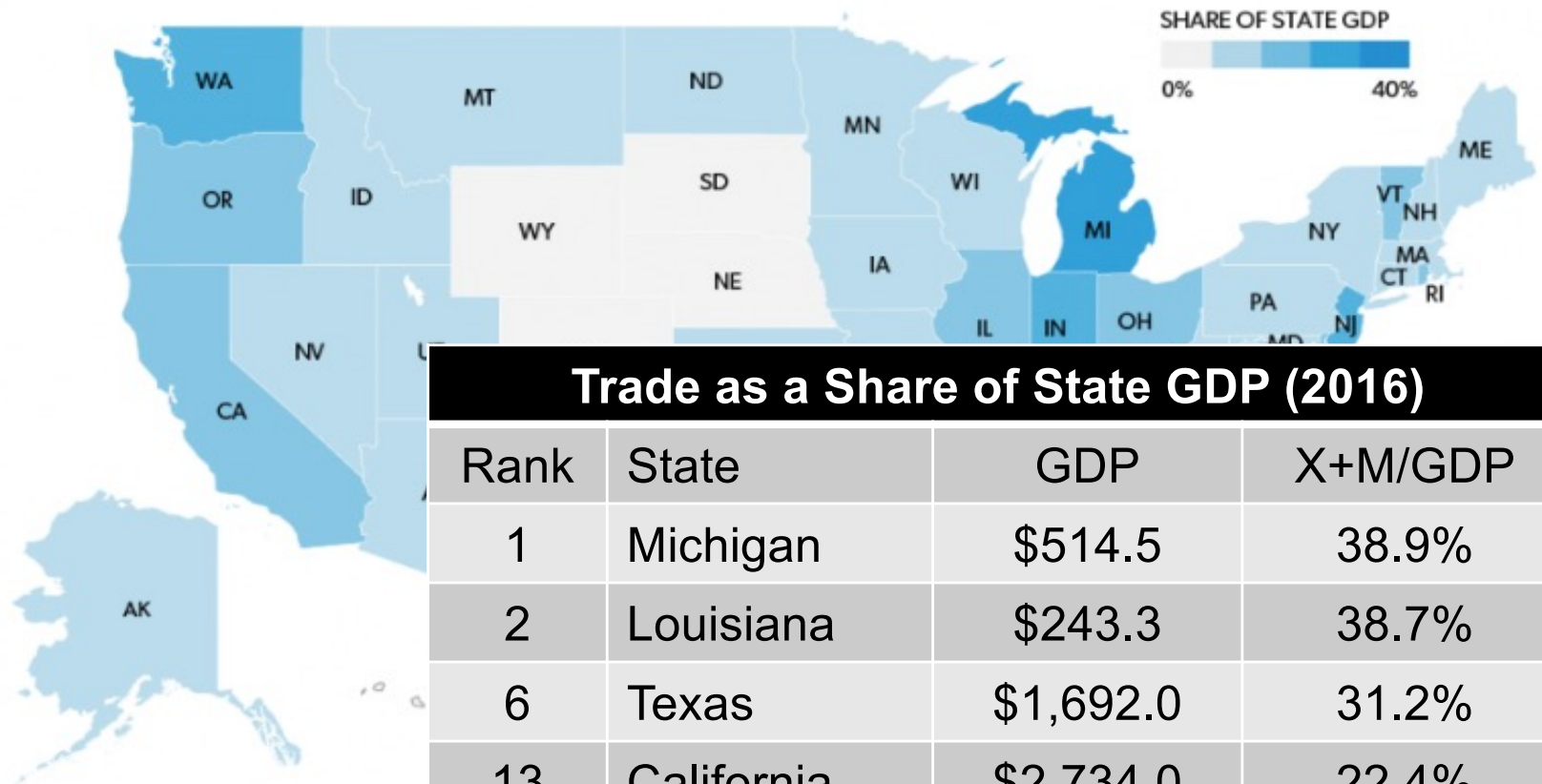


Source: US Census Bureau

Carpe Diem **AEI**

Source: Perry (2017)

International Trade as a Share of State GDP (2016)



Trade as a Share of State GDP (2016)

| Rank | State | GDP | X+M/GDP |
|------|------------|-----------|---------|
| 1 | Michigan | \$514.5 | 38.9% |
| 2 | Louisiana | \$243.3 | 38.7% |
| 6 | Texas | \$1,692.0 | 31.2% |
| 13 | California | \$2,734.0 | 22.4% |
| 32 | New York | \$1,550.4 | 13.0% |
| 51 | D.C. | \$131.7 | 1.5% |

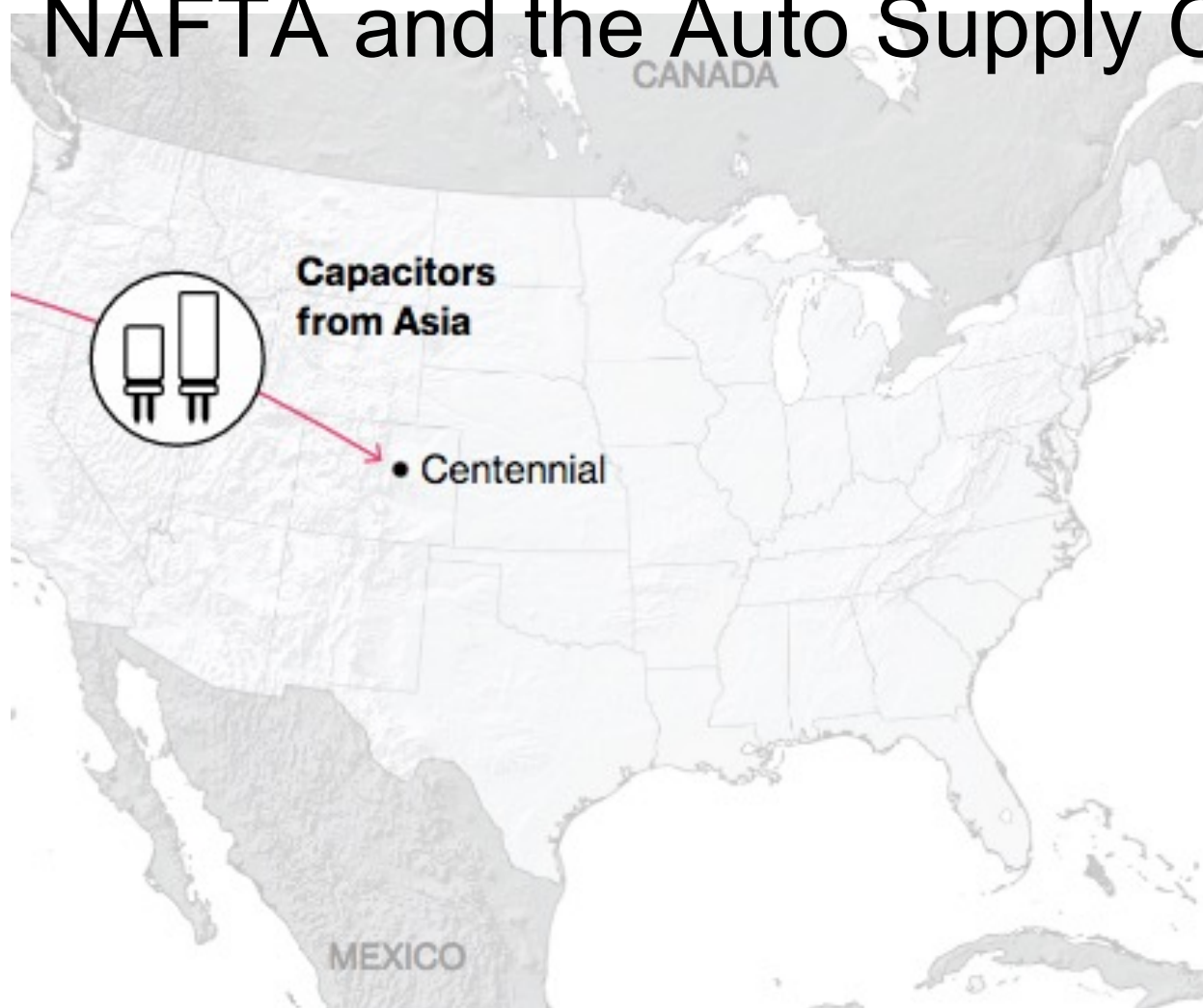
Source: US Census Bureau

Source: Perry (2017)

Supply Chains

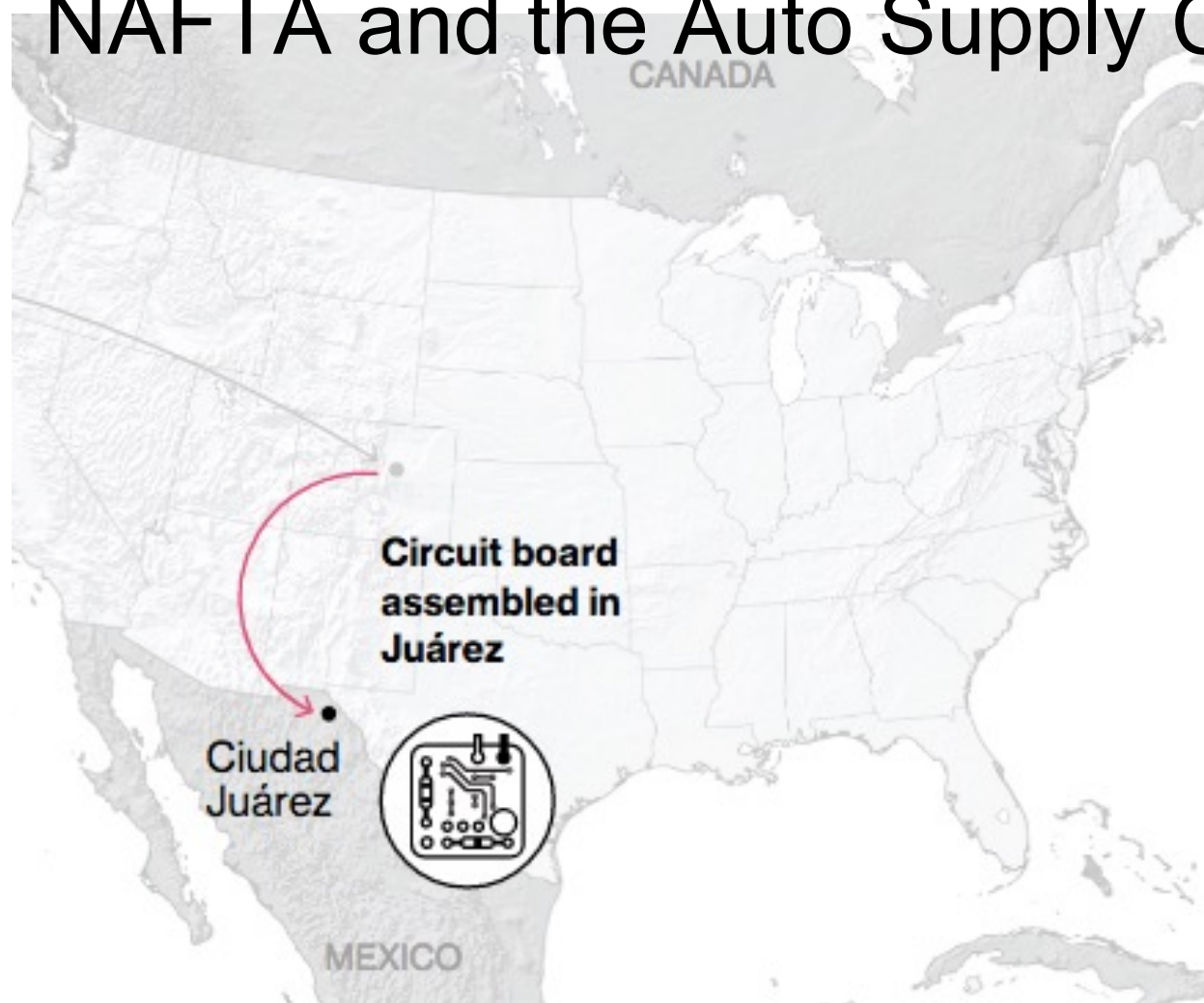
- Much trade today is intermediate inputs.
- Supply chains cross national borders multiple times
- Example from Black et al., “One Tiny Widget’s Dizzying Journey Shows Just How Critical Nafta Has Become”
Bloomberg, Feb 2, 2017

NAFTA and the Auto Supply Chain



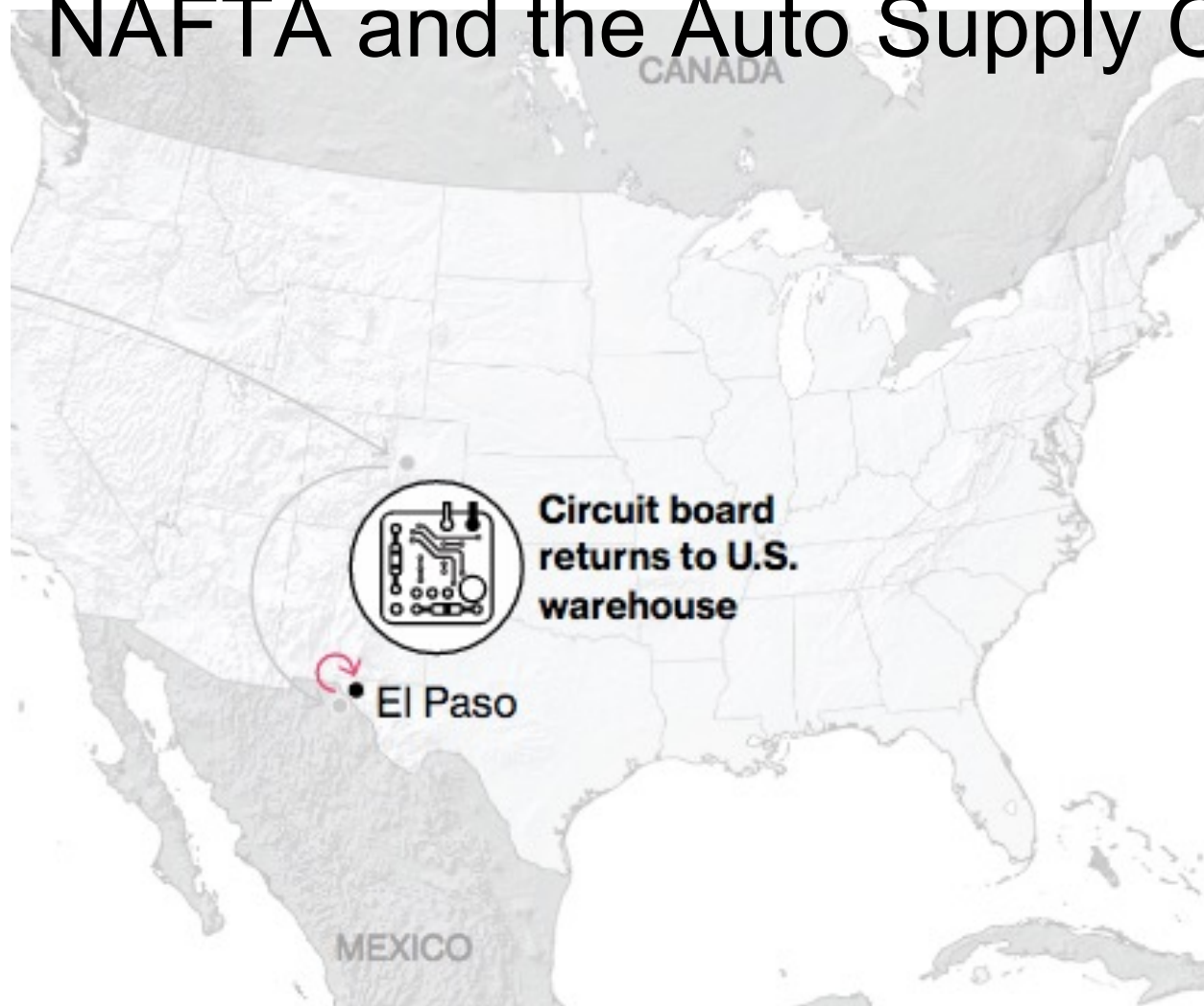
Black, Diamond, and Merrill, "One Tiny Widget's Dazzling Journey Shows Just How Critical Nafta Has Become," *Bloomberg*, February 2, 2017.

NAFTA and the Auto Supply Chain



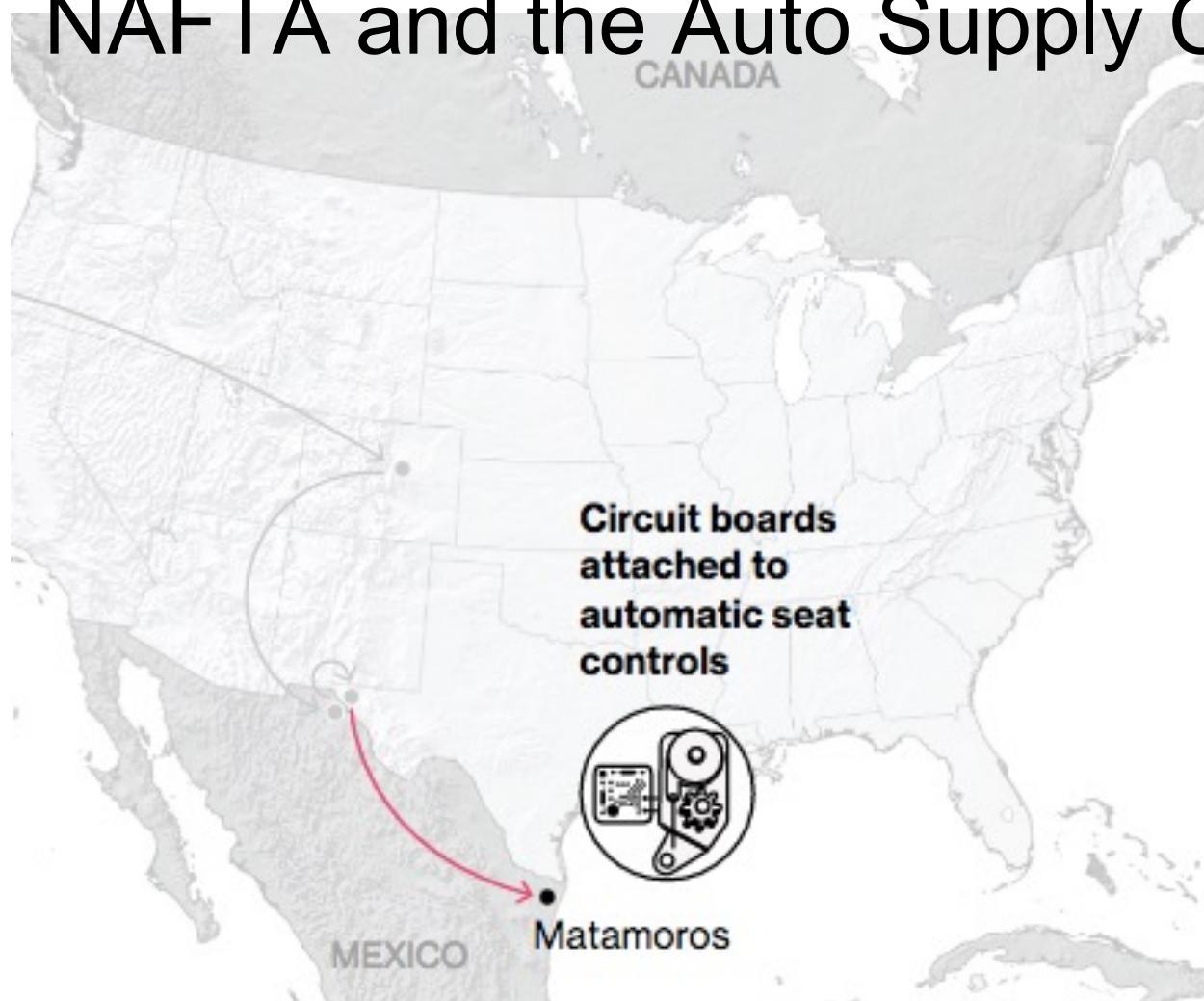
Black, Diamond, and Merrill, "One Tiny Widget's Dazzling Journey Shows Just How Critical Nafta Has Become," *Bloomberg*, February 2, 2017.

NAFTA and the Auto Supply Chain



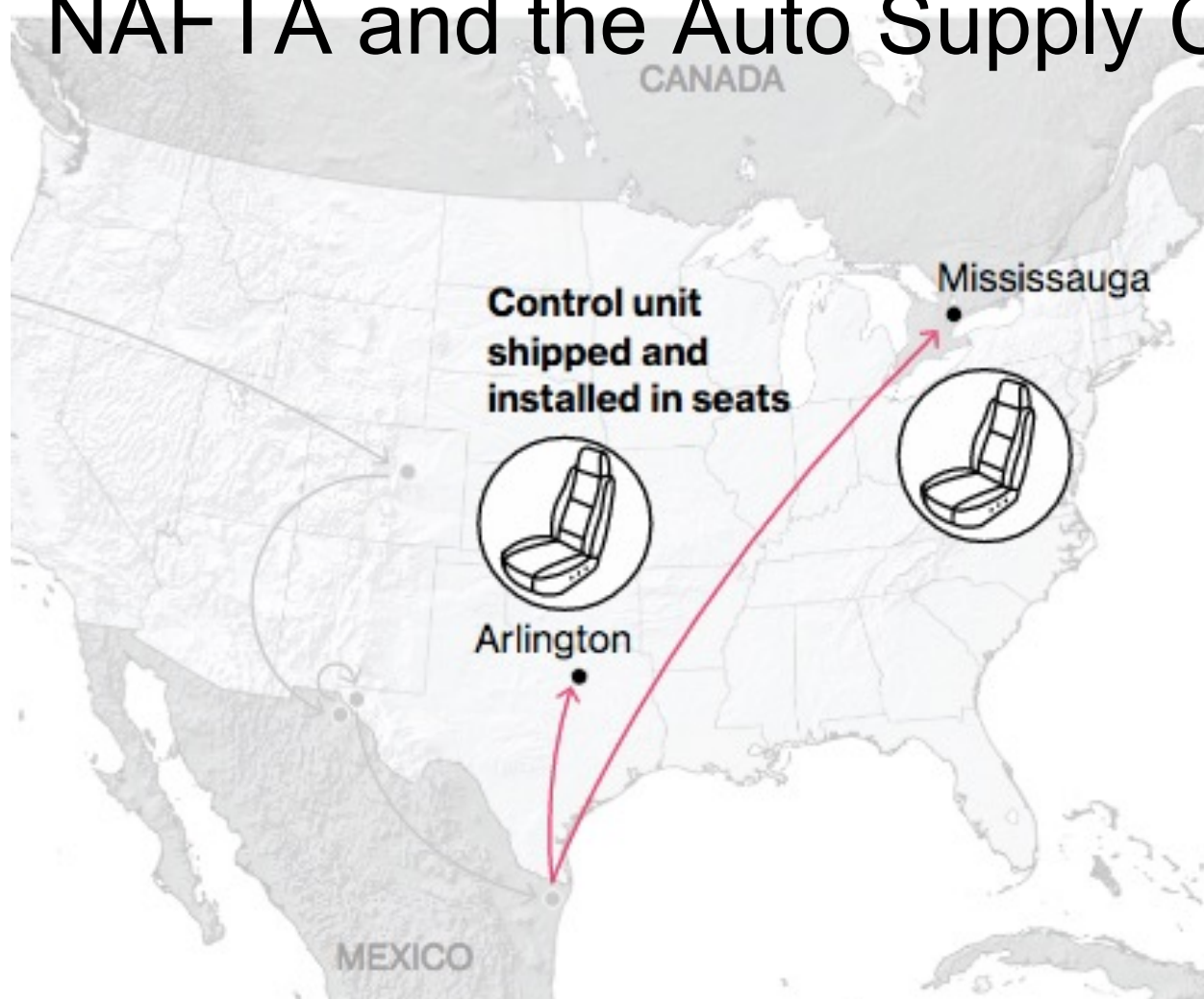
Black, Diamond, and Merrill, "One Tiny Widget's Dazzling Journey Shows Just How Critical Nafta Has Become," *Bloomberg*, February 2, 2017.

NAFTA and the Auto Supply Chain



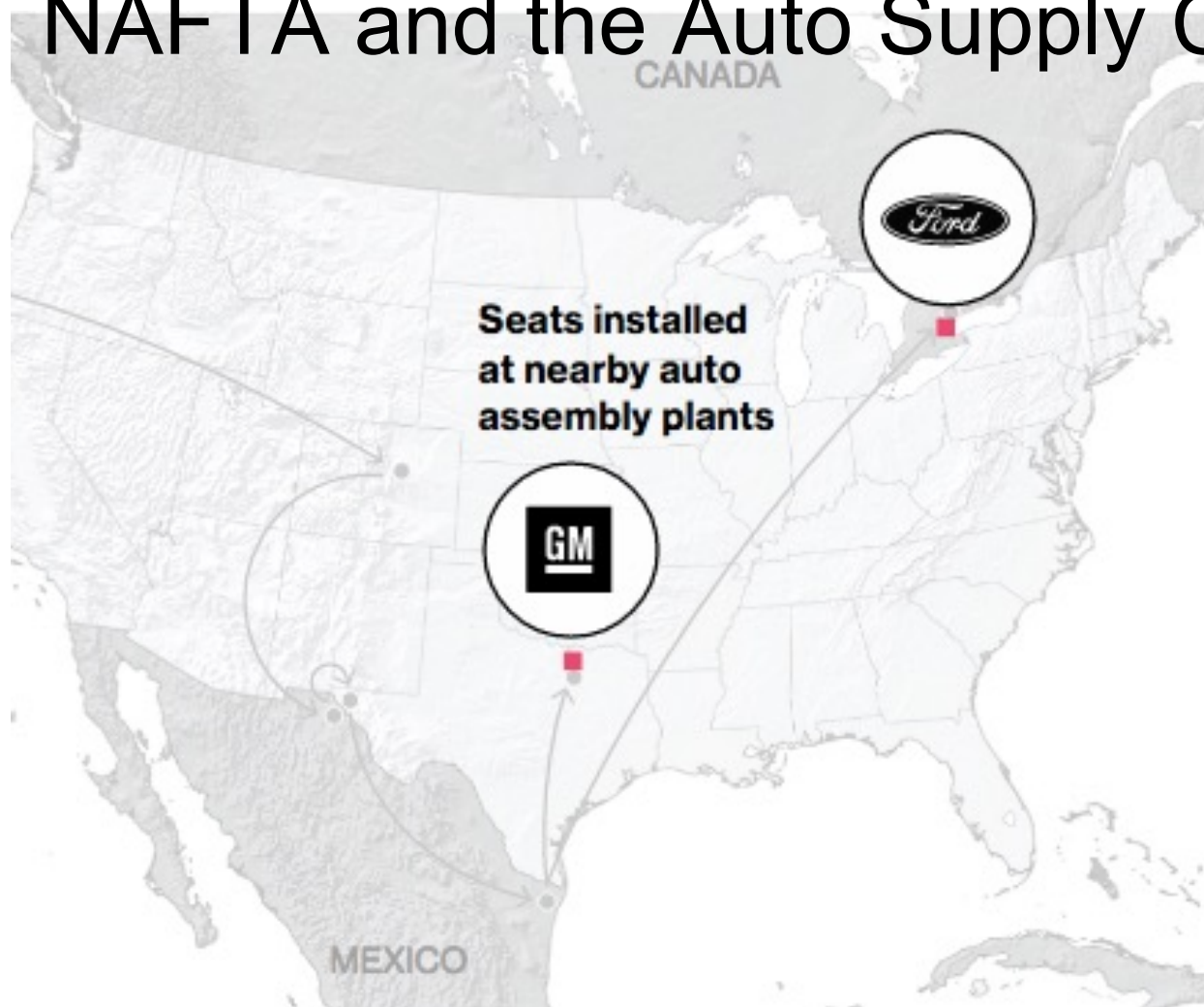
Black, Diamond, and Merrill, "One Tiny Widget's Dazzling Journey Shows Just How Critical Nafta Has Become," *Bloomberg*, February 2, 2017.

NAFTA and the Auto Supply Chain



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

NAFTA and the Auto Supply Chain



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

- **Example: The iPhone assembled in China from parts:**

| Part | Come from |
|--------------------------------|---------------------------------------------------------------------------------------------------|
| Accelerometers | Germany, the US, South Korea, China, Japan, and Taiwan. |
| Audio chips | US, UK, China, South Korea, Taiwan, Japan, and Singapore. |
| Batteries | Samsung (South Korea), which has factories in eighty countries. |
| Cameras | Qualcomm (US) and Sony (Japan), both with plants in many countries |
| Chips for 3G/4G/LTE networking | Qualcomm (US) |
| Compasses | AKM Semiconductor (Japan) with plants in the US, France, England, China, South Korea, and Taiwan. |
| Glass screen | Corning (US) with plants in twenty-six countries. |
| Gyroscopes | Switzerland |
| ... and many more | |

Source: Krueger 2020, International Trade (What Everyone Needs to Know), p. 254

Pause for Discussion

Questions

- The chart showed world manufacturing exports growing faster than exports of agriculture, fuels, and mining. Why do you think that happened?
- How do you think Michigan's trade differs from that of Louisiana?

Outline

- “Globalization”
- Trade
- **Policies that Affect Others**

Ways that countries interact economically

- Policies that affect other countries
 - Direct
 - Indirect

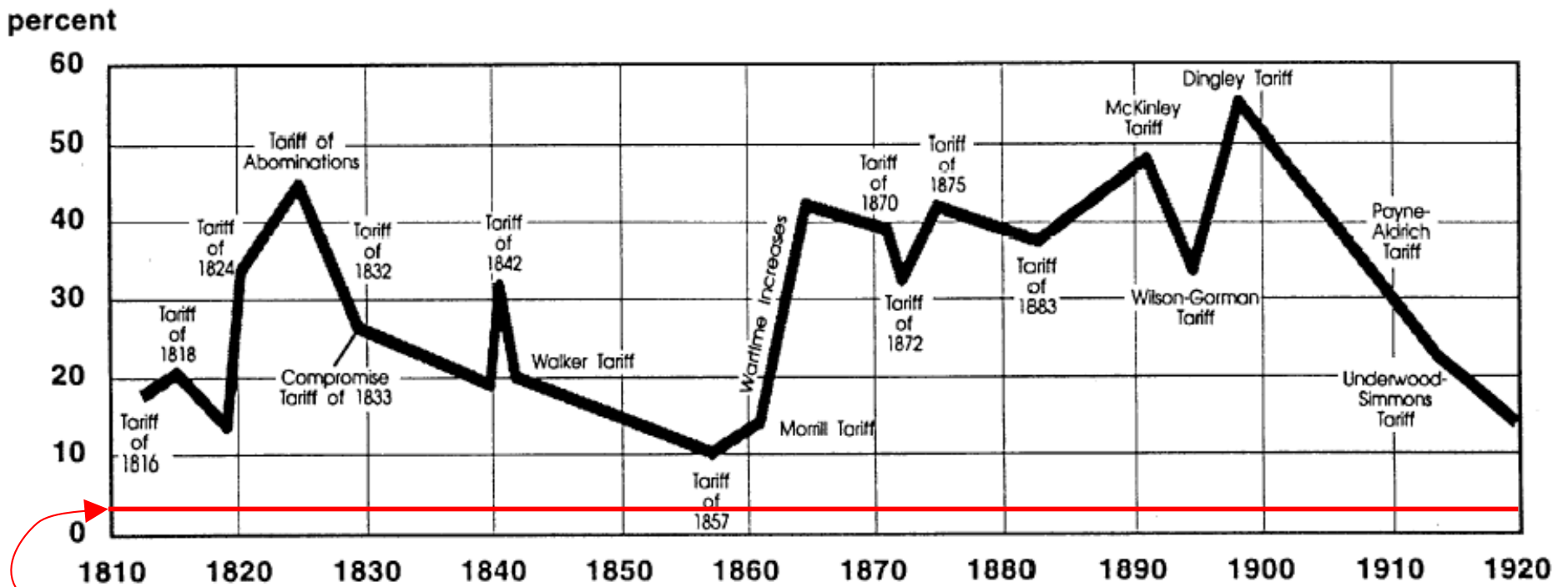
Ways that countries interact economically

- Policies that affect other countries
 - Direct
 - Trade policies (tariffs, quotas, FTAs, anti-dumping,...)
 - Foreign aid
 - Capital controls
 - Exchange rate management
 - Immigration restrictions
 - Indirect

Ways that countries interact economically

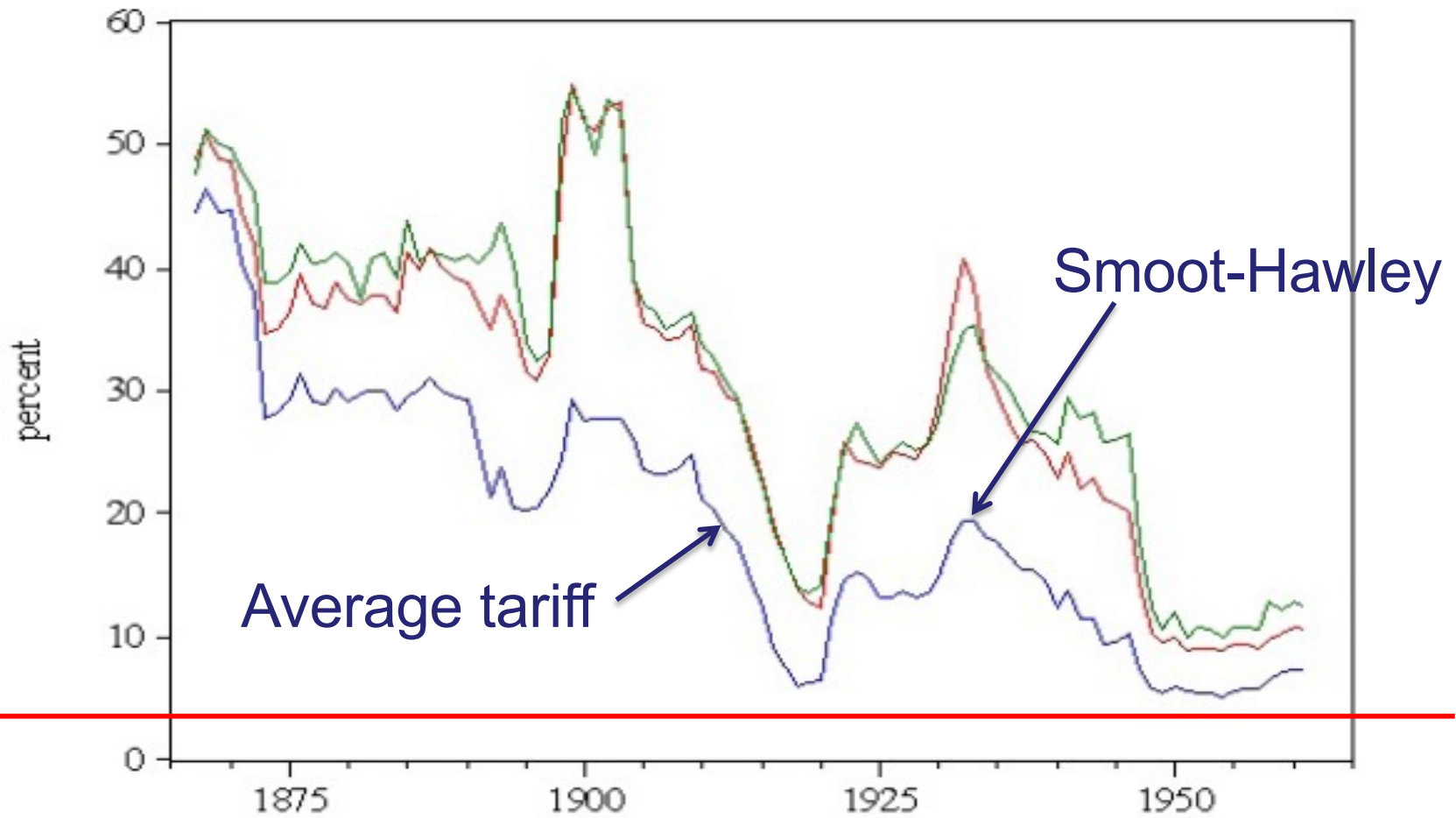
- Policies that affect other countries
 - Indirect
 - Subsidies (esp. agriculture, but lately green manufacturing)
 - » US farm subsidies > foreign aid
 - Macro policies (monetary, fiscal)
 - » Exchange-rate policies
 - Environmental policies
 - Standards
 - » Labor
 - » Health & safety
 - » Norms

- US tariff history: 1810-1920



Today

- US tariff history: 1865-1960

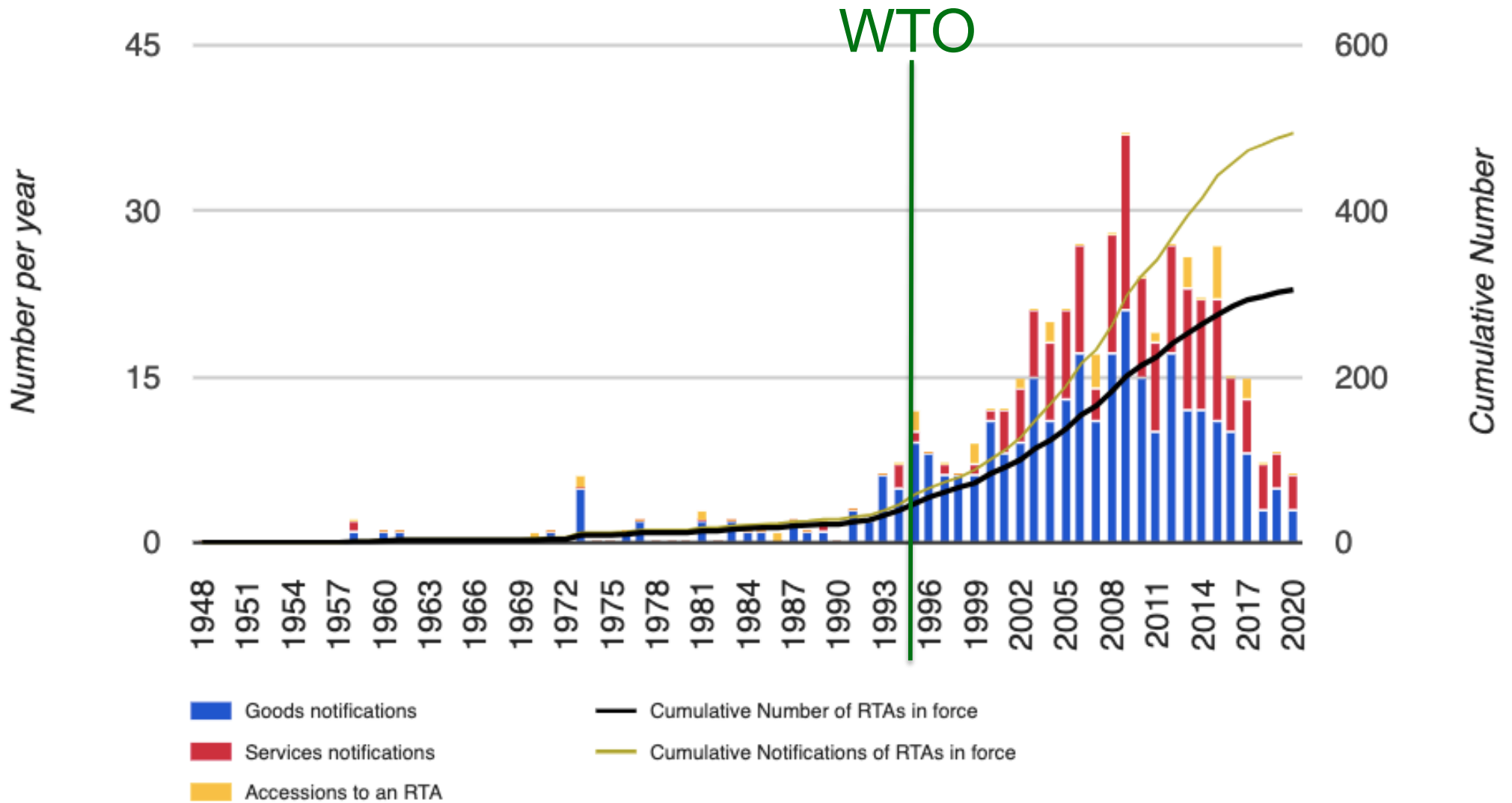


Today

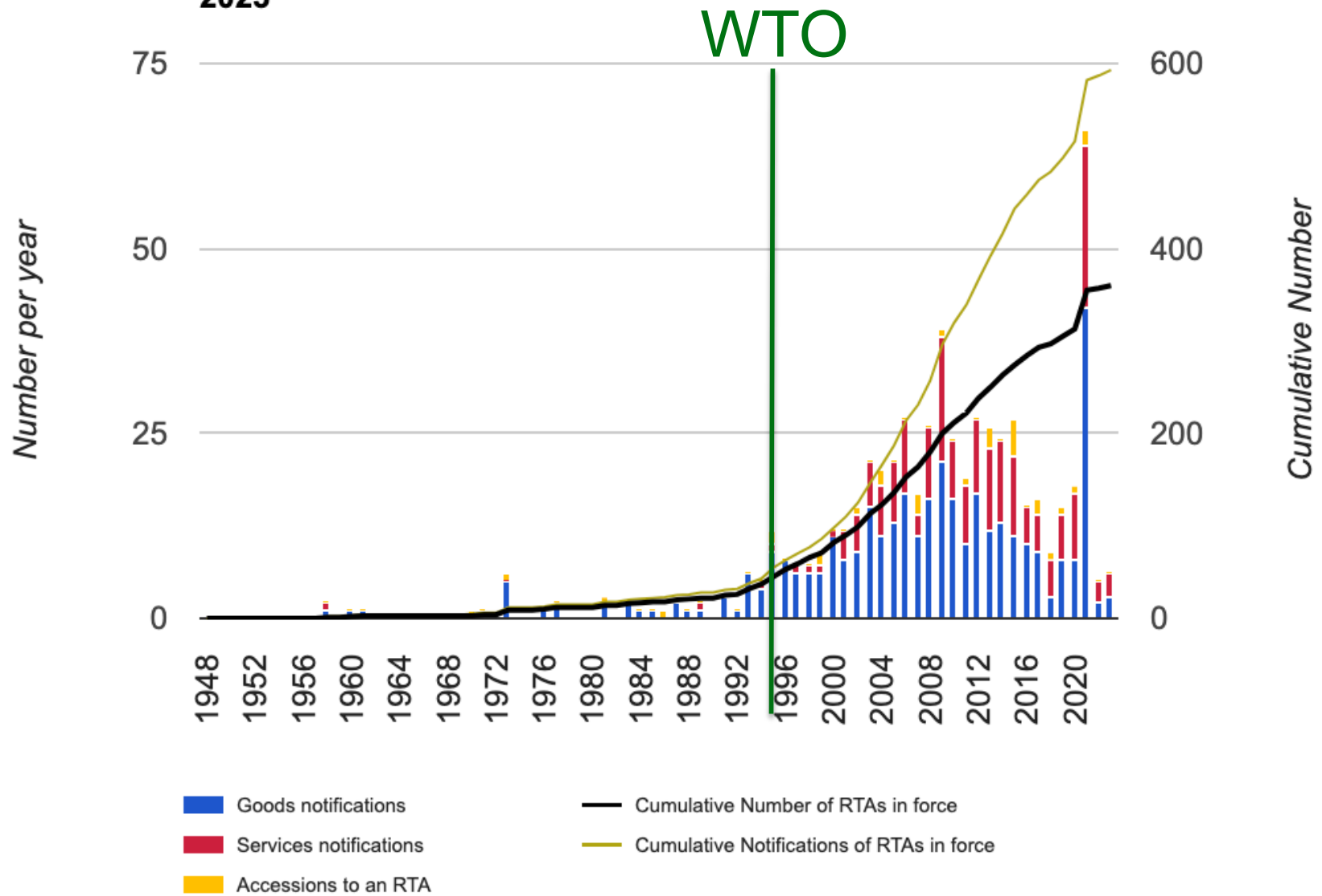
Trade Agreements

- Past
 - GATT Rounds: Multilateral reductions in tariffs and other barriers
 - Uruguay Round created WTO in 1995
 - European Economic Community (now EU)
 - Customs union
 - NAFTA = North American Free Trade Agreement (now USMCA)
 - Free trade among US, Canada, Mexico
 - Other FTAs: Several hundred in force today

RTAs currently in force (by year of entry into force), 1948 - 2020

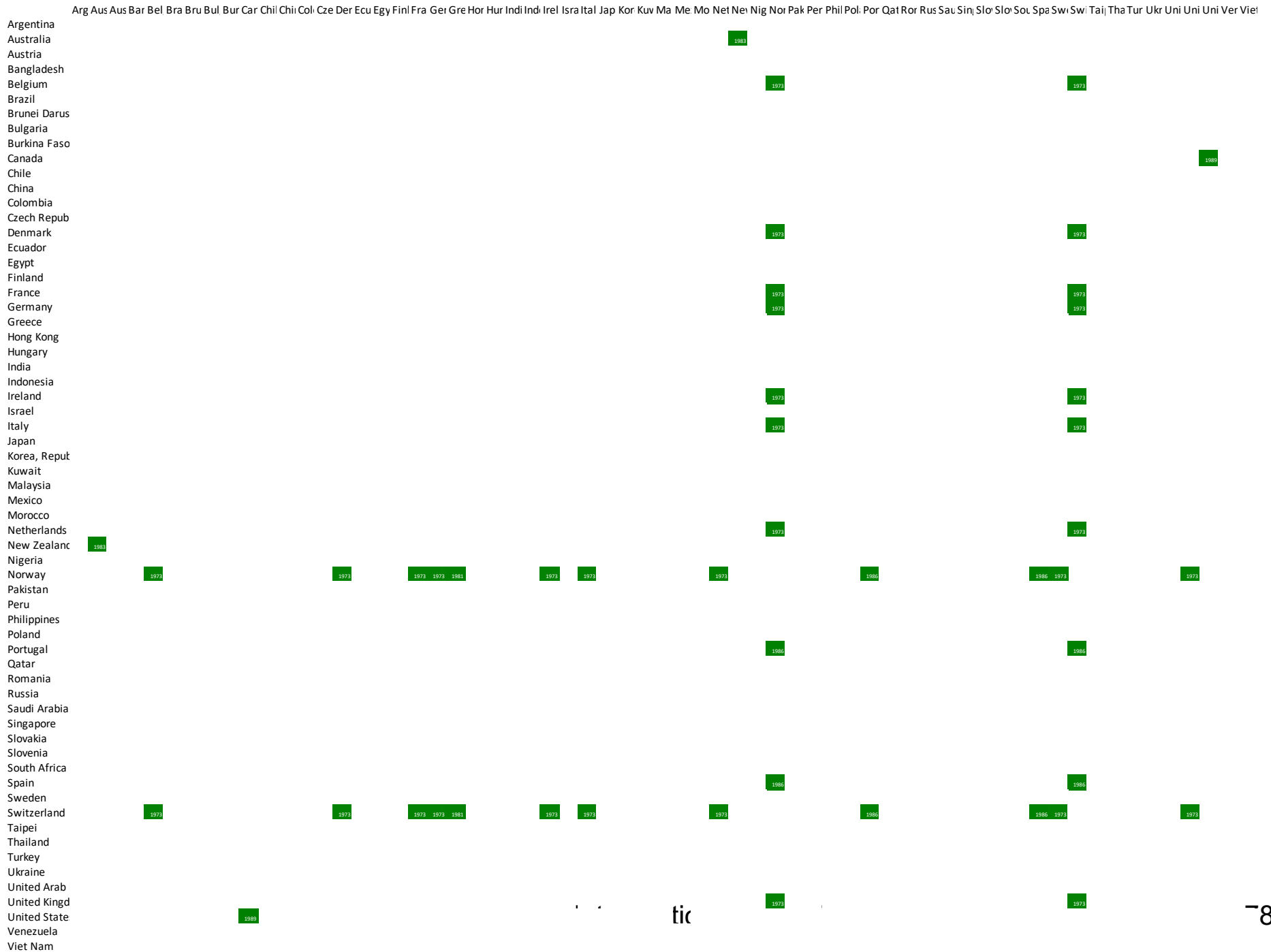


RTAs currently in force (by year of entry into force), 1948 - 2023



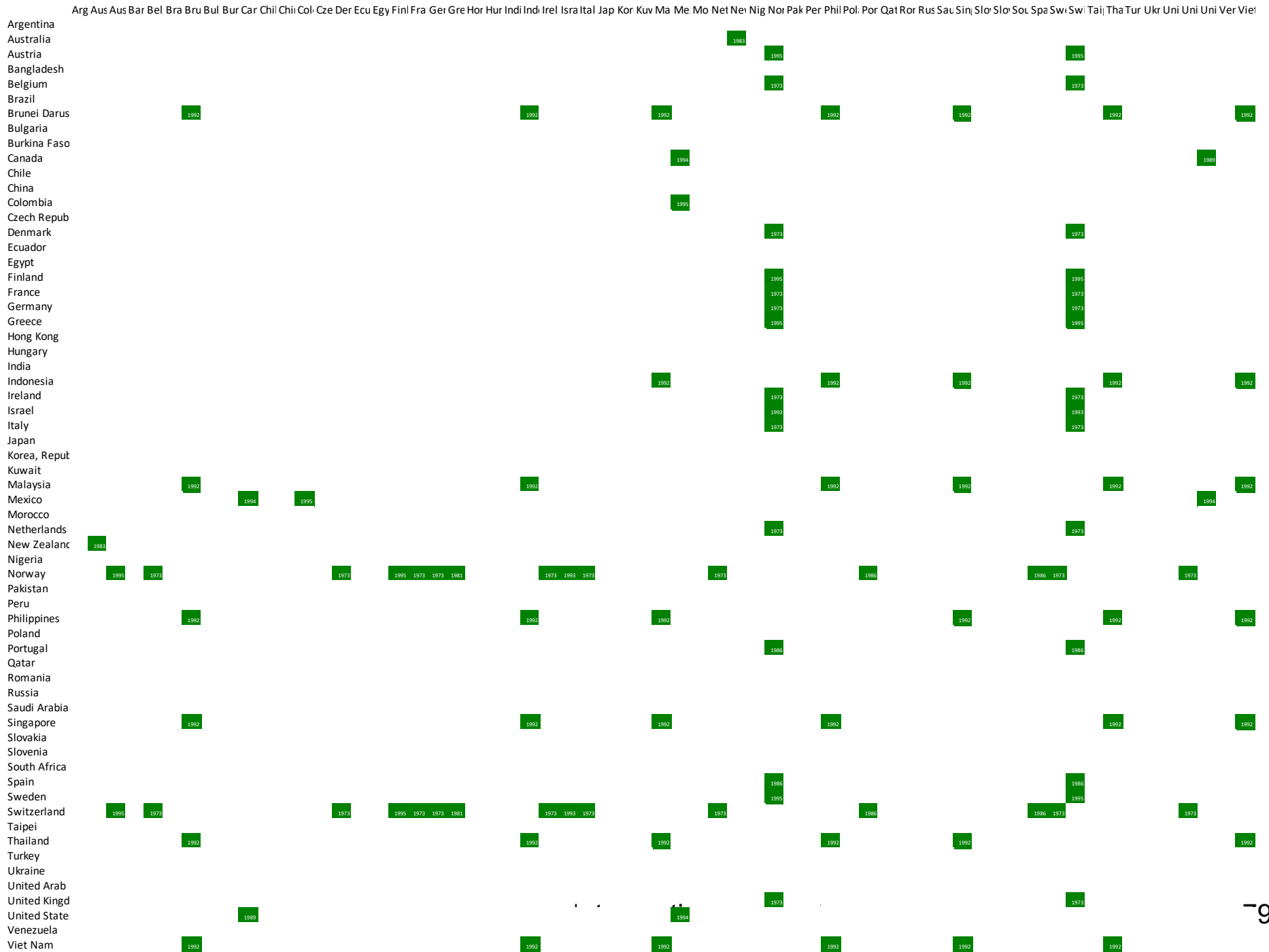
Countries connected by FTAs only, as of 1990

1%



Countries connected by FTAs only, as of 1995

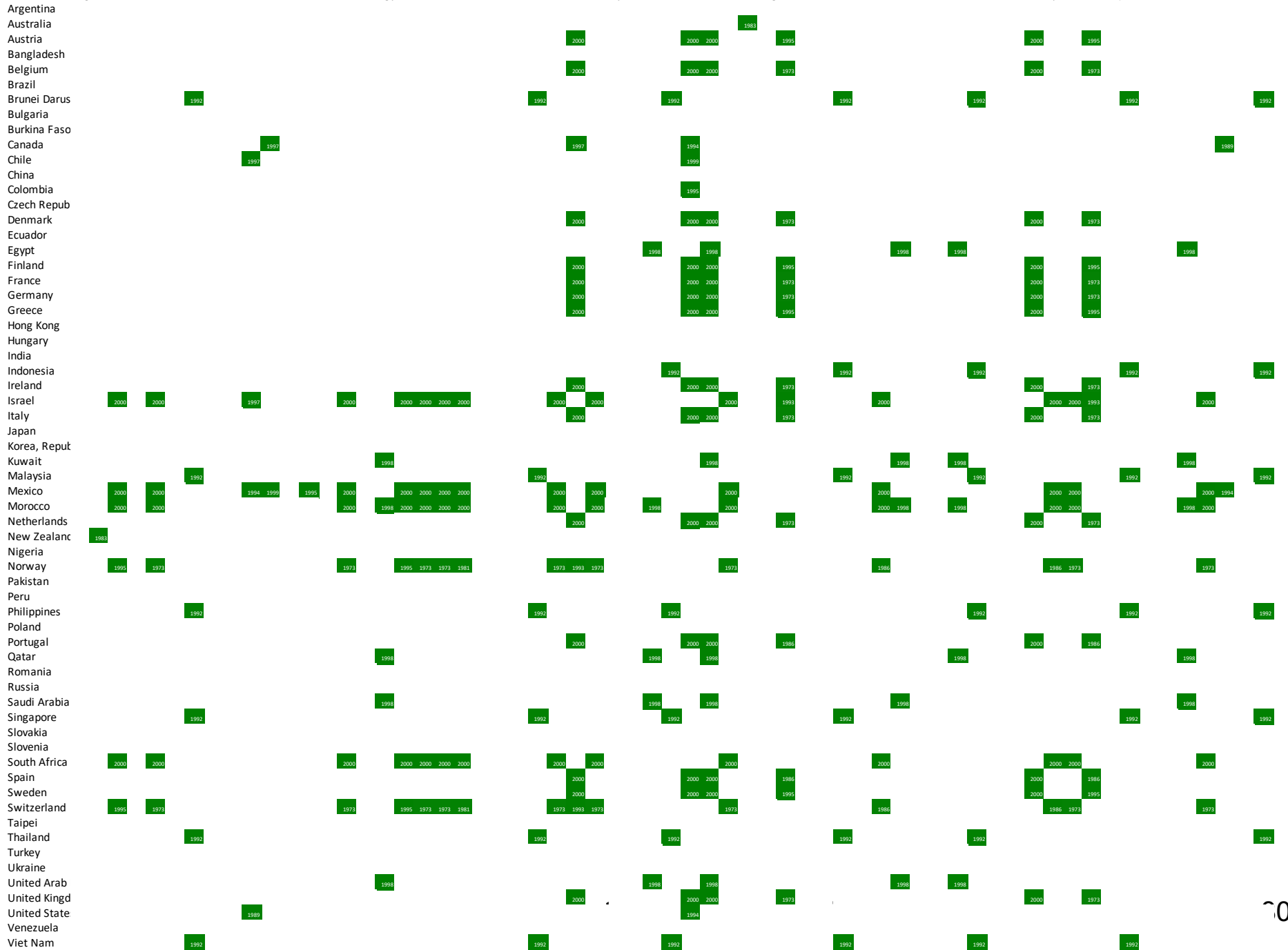
3%



Countries connected by FTAs only, as of 2000

7%

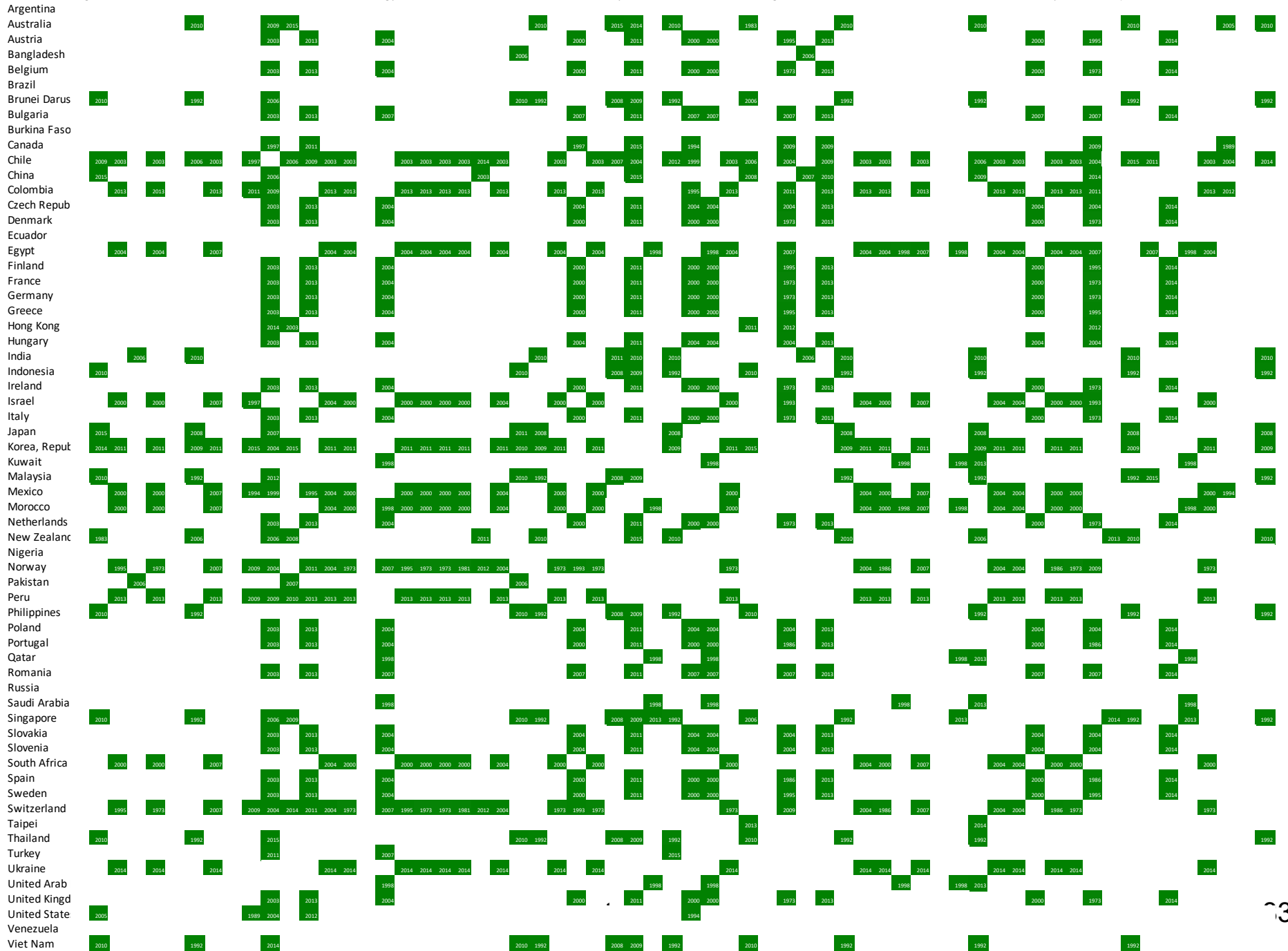
Arg Aus Aus Bar Bel Bra Bru Bul Bur Car Chil Chii Col Cze Der Ecu Egi Finl Fra Ger Gre Hor Hur Indi Indl Irel Isra Ital Jap Kor Kuv Ma Me Mo Net Nei Nig Nor Pak Per Phil Pol. Por Qat Ror Rus Sau Sin Slo Slo Soc Spa Swi Swi Taij Tha Tur Ukr Uni Uni Uni Ver Vie!



Countries connected by FTAs only, as of 2015

20%

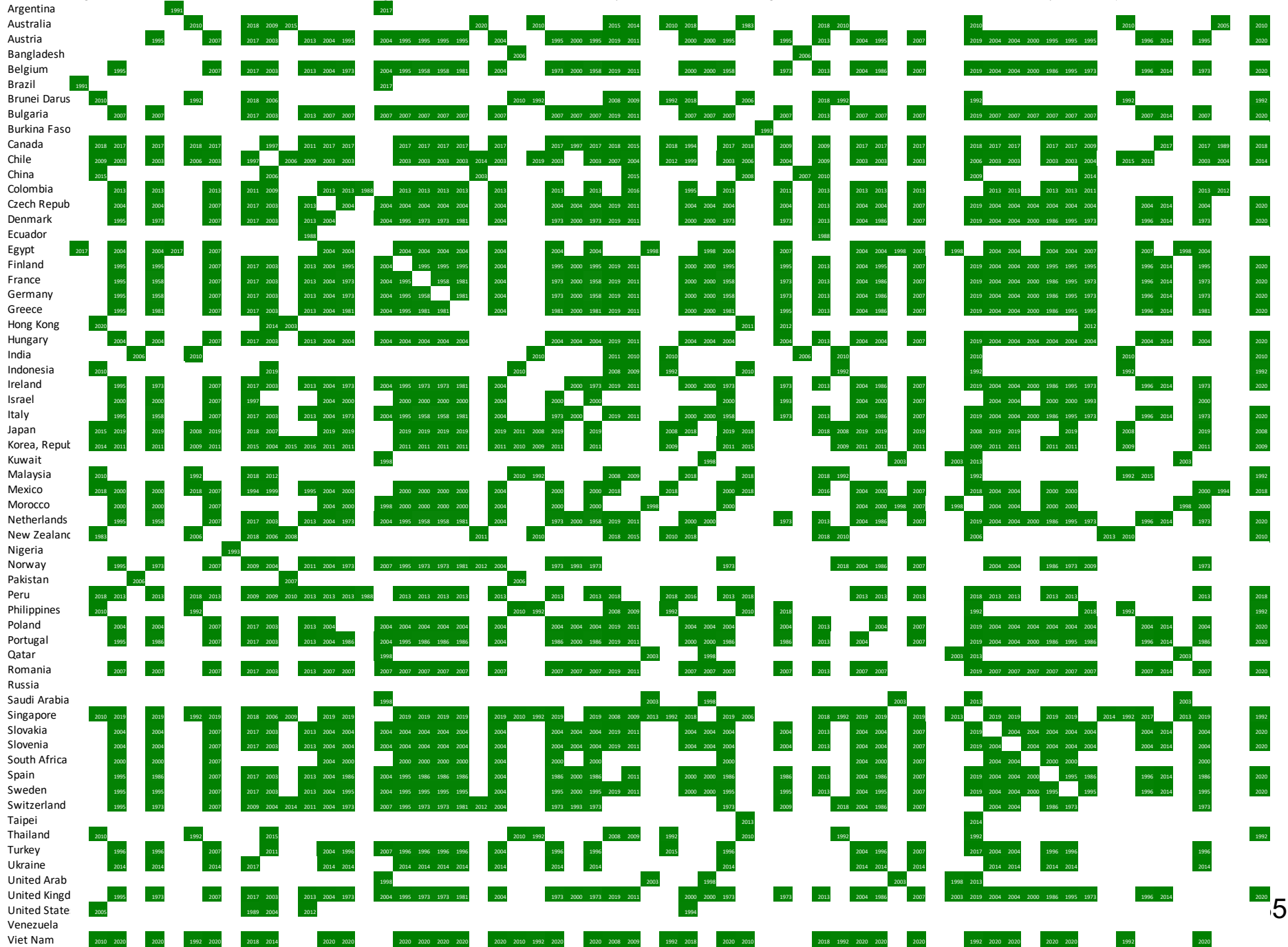
Arg Aus Bar Bel Bra Bru Bul Bur Car Chi Chil Col Cze Der Ecu Egy Finl Fra Ger Gre Hor Hur Indi Indl Irel Ita Ital Jap Kor Kuv Ma Me Mo Net Nei Nig Nor Pak Per Phil Pol. Por Qat Ror Rus Sau Sinj Slo Slo Soc Spa Swi Swi Taij Tha Tur Ukr Uni Uni Uni Ver Viet



Countries connected by FTAs or CUs as of 2020

38%

Arg Aus Bar Bel Bra Bru Bul Bur Car Chi Chil Col Cze Der Ecu Egi Fin Fra Ger Gre Hor Hur Indi Indl Irel Isra Ital Jap Kor Kuv Ma Me Mo Net Nei Nig Nor Pak Per Phil Pol. Por Qat Ror Rus Sau Sinj Slo Slo Soc Spa Swr Swi Taij Tha Tur Ukr Uni Uni Uni Ver Viet



Trade Agreements

- Present
 - Doha Round: Multilateral negotiations, begun 2001
 - Negotiations limped along until December 2015
 - Round ended in failure at 2015 WTO Ministerial in Nairobi
 - Trans-Pacific Partnership (TPP)
 - 12 country-FTA, “21st century trade agreement”
 - Would have included: US, Japan and others
 - Trump pulled out
 - Other eleven formed CPTPP, effective 12/30/18:
 - **Comprehensive and Progressive Agreement for Trans-Pacific Partnership**

Trade Agreements

- Most Recent at WTO Ministerial Meetings
 - “Bali Package” on Trade Facilitation
 - December 2013
 - First ever agreement reached under WTO
 - The 2015 Nairobi commitment to abolish export subsidies for farm products
 - 2017 WTO Ministerial in Buenos Aires did little
 - Was planned for June 2020, Kazakhstan
 - Postponed due to Covid-19
 - Finally happened June 2022 in Geneva, Switzerland
 - Didn’t do much: Ended subsidies to illegal fishing
 - Next, #13, will be in 2024, in United Arab Emirates

Pause for Discussion

Questions

- Is the US a leader in liberalizing trade?
- How do you think the Republicans and Democrats view trade and trade policy?

John Oliver: “Trade” 8/19/18

Tariffs



Fox News on Trump Tariffs



John Oliver: “Trade” 8/19/18

Trade Deficit



John Oliver: “Trade” 8/19/18

Manufacturing



John Oliver: “Trade” 8/19/18

Steel



John Oliver: Death by China



John Oliver: Death by Stupidity

