Il quadro macroeconomico: dati e prospettive

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Accademia di Agricoltura—29 giugno 2022, slide a
https://terna.to.it/aa2022.pdf

Outline

Introduzione
- Le fonti
- I dati

Mappe

Le mappe: le superpotenze
- USA
- Cina
- USA–Russia–Cina–Africa

Le mappe: la guerra
- Ucraina
- Russia-Ucraina

Complessità

Parole e immagini

- Un sottotitolo per il mio intervento avrebbe potuto essere: *Brevi cenni sul Mondo e dintorni...*
- Per rispettare *brevi* mi servirò di interessanti fonti di dati mondiali, con molti grafici e mappe: i siti web dell'*Atlas of economic complexity*[1] e dell'*Observatory of economic complexity*[2].
- Sono dovuti a due grandi studiosi: Ricardo Hausmann e César A. Hidalgo[3].

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1 https://atlas.cid.harvard.edu/

2 https://oec.world/en/home-a

3 C. Hidalgo and R. Hausmann. The building blocks of economic complexity. Proceedings of the National Academy of Sciences, 106(26):10570, 2009. https://www.pnas.org/doi/full/10.1073/pnas.0900943106

Rapporto tra nazioni ricche e povere

- Iniziamo da una recente lezione[4] di Hausmann al Santa Fe Institute[5].
- Quando Adam Smith pubblicò la prima edizione della Ricchezza Nazioni il rapporto tra la nazione più ricca e la più povera era di 4 a 1.
- Ora...

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4 https://www.youtube.com/watch?v=ZHpg-CriIyk

5 https://www.santafe.edu

Malawi

x 4 Haiti

x 4 Marocco

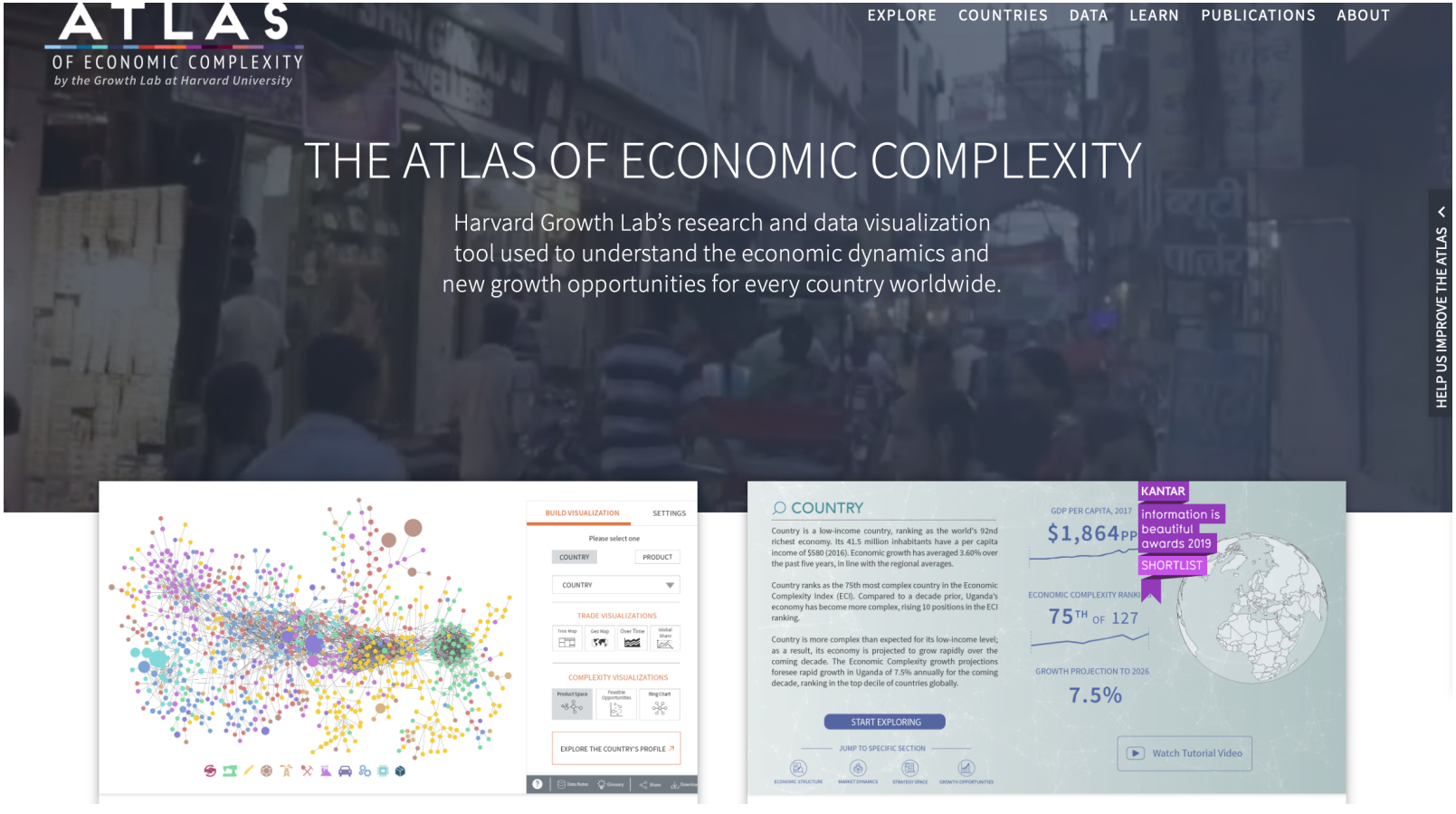
x 4 Polonia

x 4 Singapore

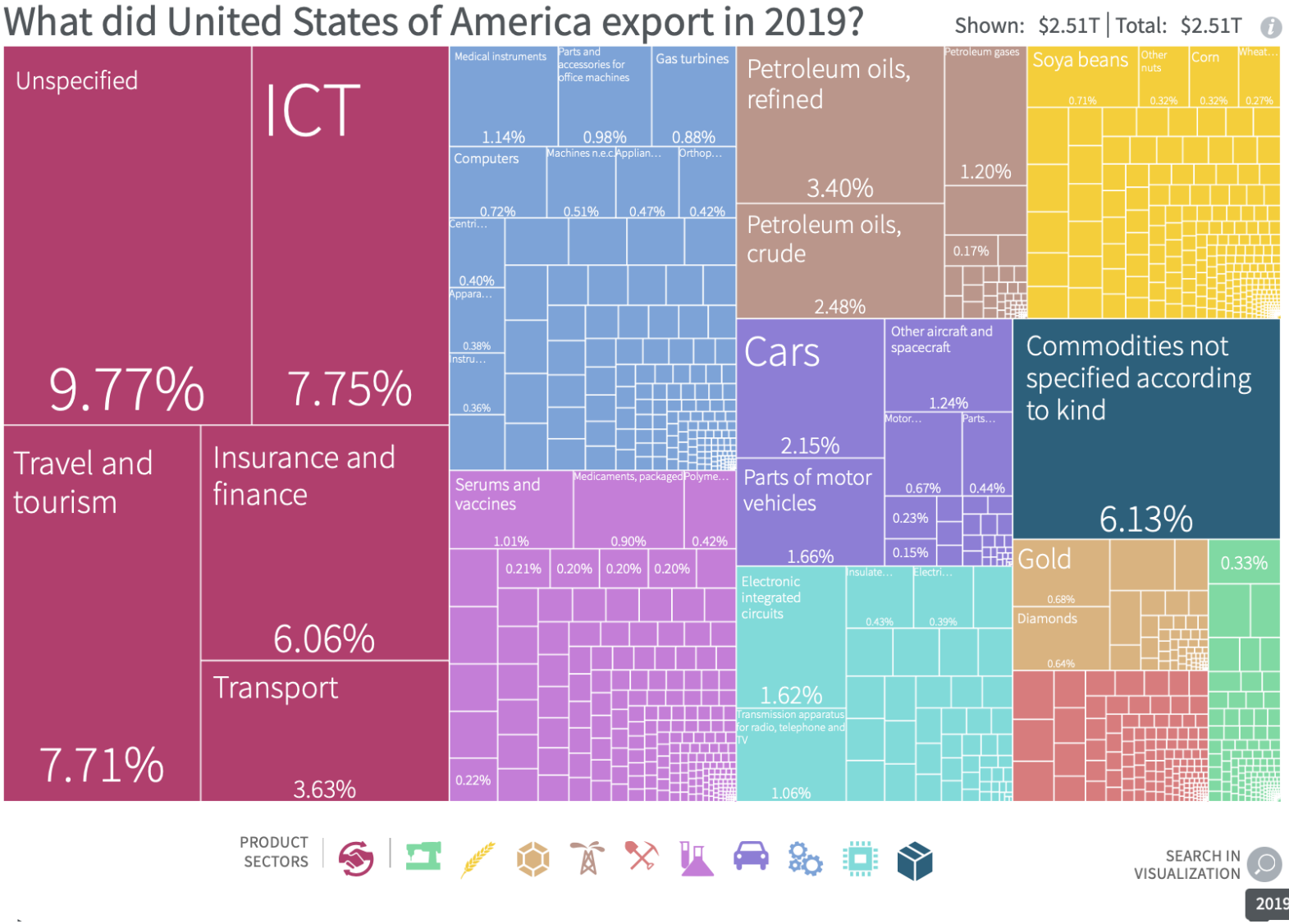
Il calcolo

$4 \times 4 \times 4 \times 4 \Rightarrow 256$

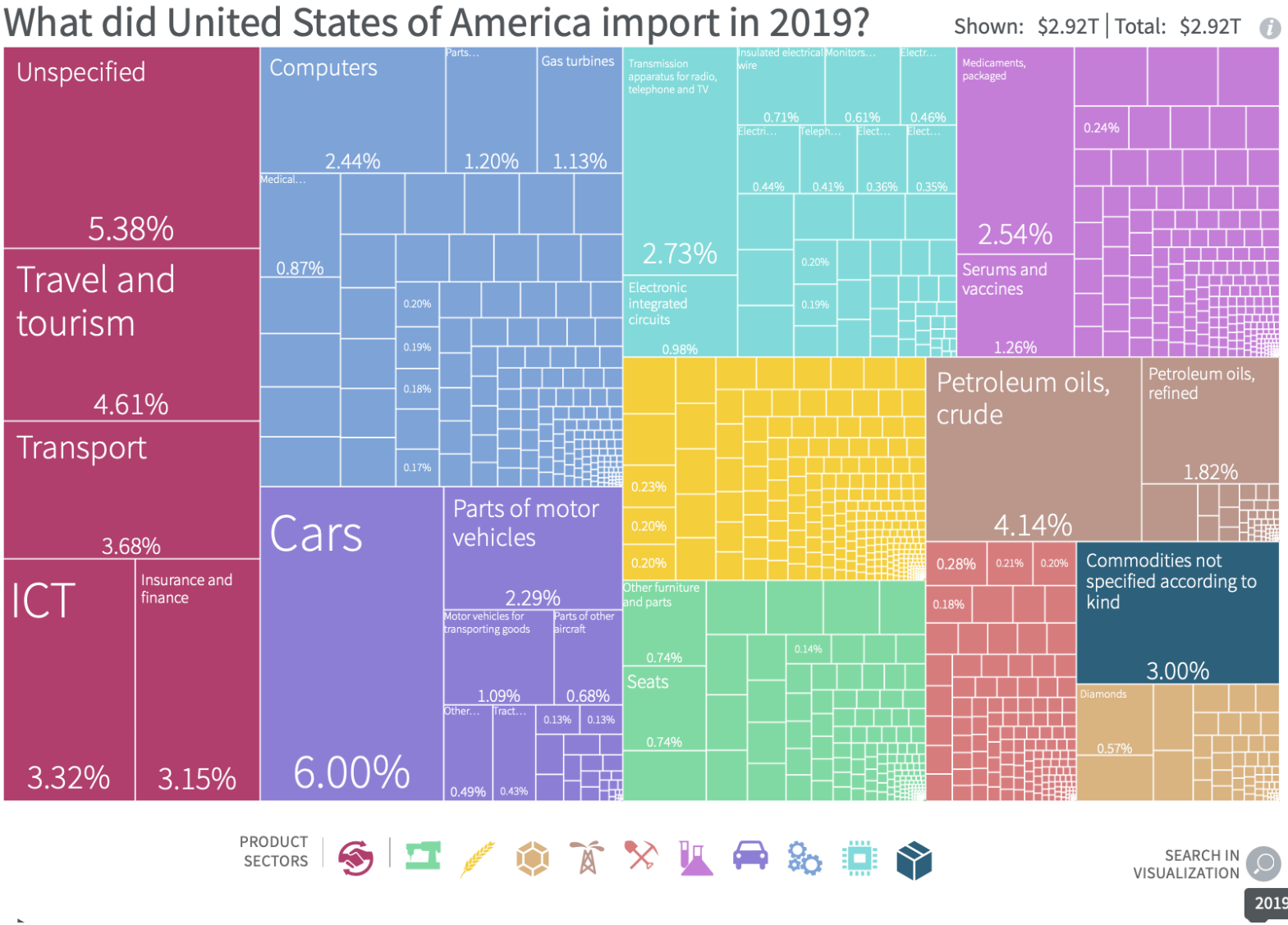
La prima pagina dell'Atlas



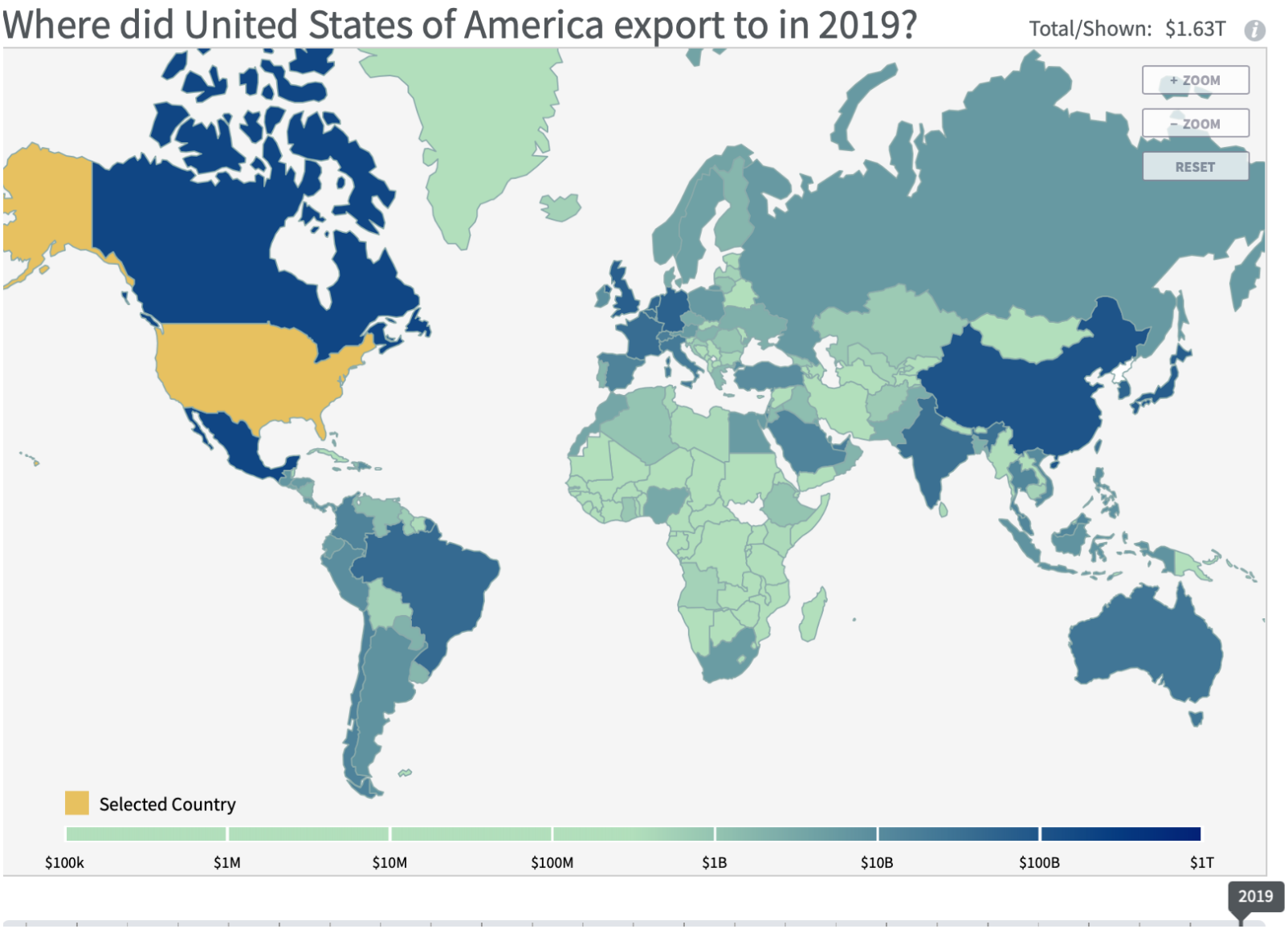
Usa 1/4


What did United States of America export in 2019?
Shown: $2.51T | Total: $2.51T
Unspecified 9.77%
ICT 7.75%
Travel and tourism 7.71%
Insurance and finance 6.06%
Transport 3.63%
Medical instruments 1.14%
Parts and accessories for office machines 0.98%
Gas turbines 0.88%
Computers 0.72%
Machines n.e.c. 0.51%
Applian… 0.47%
Orthop… 0.42%
Centri… 0.40%
Appara… 0.38%
Instru… 0.36%
Serums and vaccines 1.01%
Medicaments, packaged 0.90%
Polyme… 0.42%
0.21%
0.20%
0.20%
0.20%
0.22%
Petroleum oils, refined 3.40%
Petroleum oils, crude 2.48%
Petroleum gases 1.20%
0.17%
Soya beans 0.71%
Other nuts 0.32%
Corn 0.32%
Wheat… 0.27%
Cars 2.15%
Other aircraft and spacecraft 1.24%
Motor… 0.67%
Parts… 0.44%
0.23%
0.15%
Parts of motor vehicles 1.66%
Commodities not specified according to kind 6.13%
Gold 0.68%
Diamonds 0.64%
0.33%
Electronic integrated circuits 1.62%
Insulate… 0.43%
Electri… 0.39%
Transmission apparatus for radio, telephone and TV 1.06%
PRODUCT SECTORS
SEARCH IN VISUALIZATION
2019

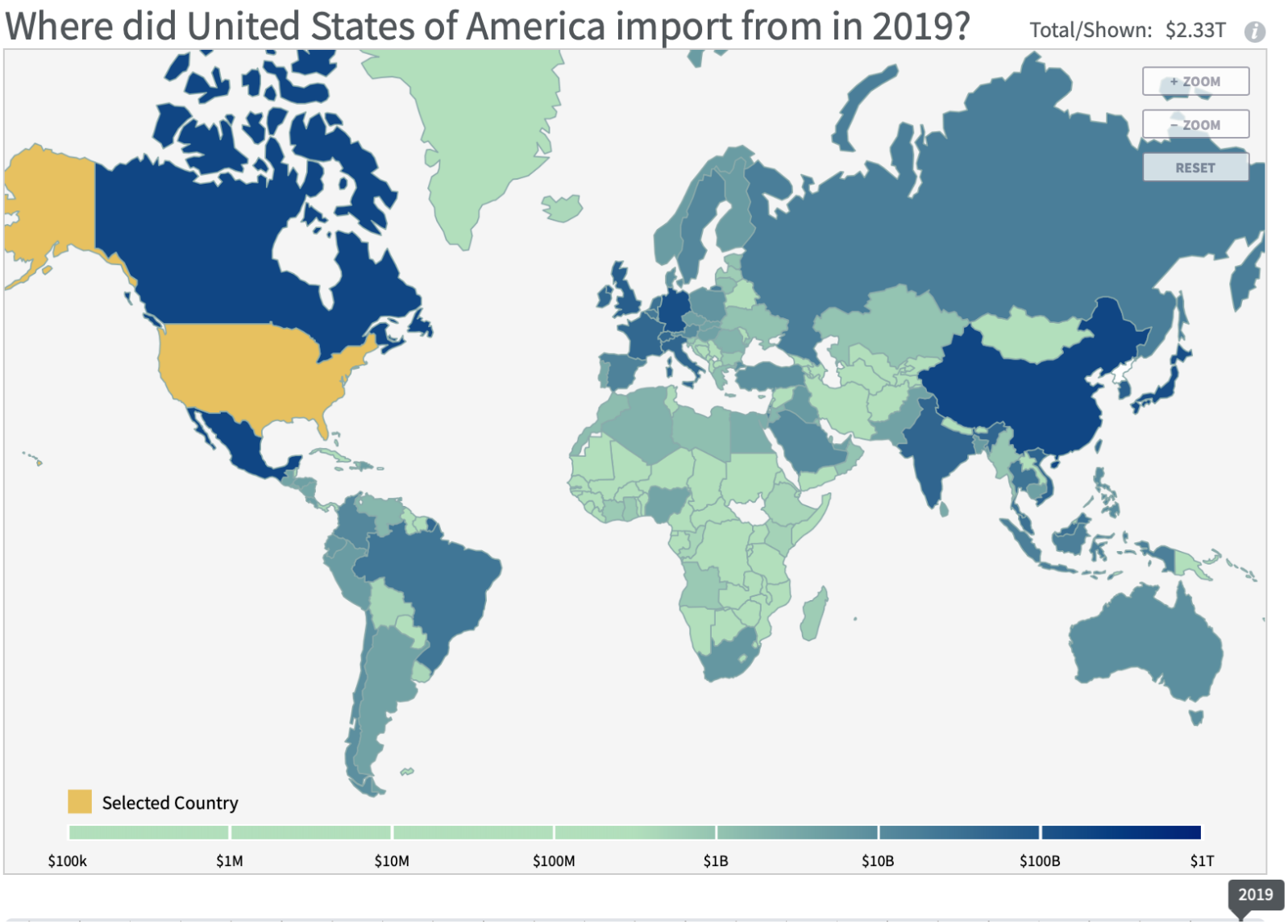
Usa 2/4


What did United States of America import in 2019?
Shown: $2.92T | Total: $2.92T
Unspecified
5.38%
Travel and tourism
4.61%
Transport
3.68%
ICT
3.32%
Insurance and finance
3.15%
Computers
2.44%
Parts…
1.20%
Gas turbines
1.13%
Medical…
0.87%
0.20%
0.19%
0.18%
0.17%
Cars
6.00%
Parts of motor vehicles
2.29%
Motor vehicles for transporting goods
1.09%
Parts of other aircraft
0.68%
Other…
0.49%
Tract…
0.43%
0.13%
0.13%
Transmission apparatus for radio, telephone and TV
2.73%
Electronic integrated circuits
0.98%
Insulated electrical wire
0.71%
Monitors…
0.61%
Electr…
0.46%
Electri…
0.44%
Teleph…
0.41%
Elect…
0.36%
Elect…
0.35%
0.20%
0.19%
0.23%
0.20%
0.20%
Other furniture and parts
0.74%
Seats
0.74%
0.14%
Medicaments, packaged
2.54%
Serums and vaccines
1.26%
0.24%
Petroleum oils, crude
4.14%
Petroleum oils, refined
1.82%
0.28%
0.21%
0.20%
0.18%
Commodities not specified according to kind
3.00%
Diamonds
0.57%
PRODUCT SECTORS
SEARCH IN VISUALIZATION
2019

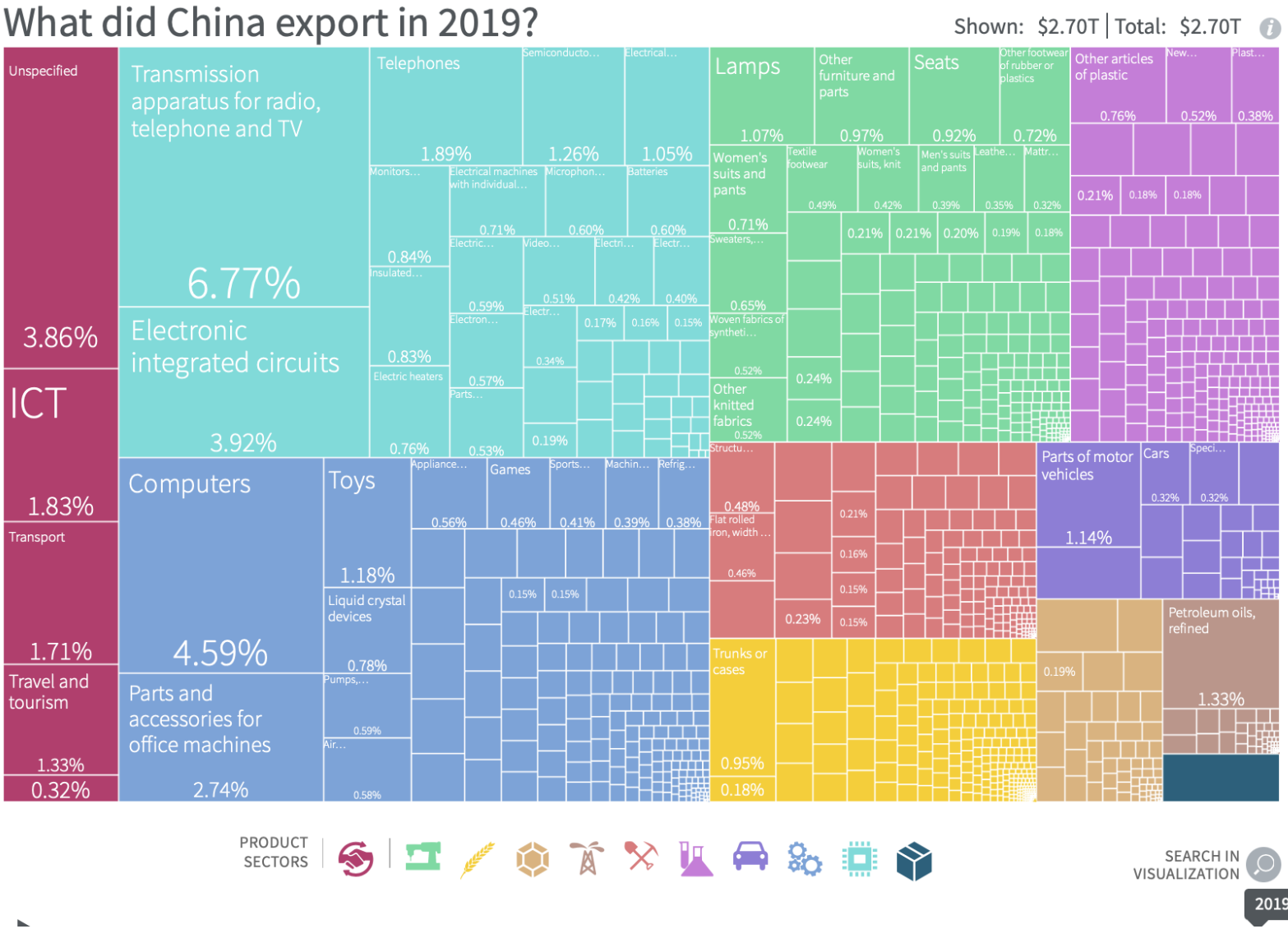
Usa 3/4


Where did United States of America export to in 2019?
Total/Shown: $1.63T
+ ZOOM
− ZOOM
RESET
Selected Country
$100k
$1M
$10M
$100M
$1B
$10B
$100B
$1T
2019

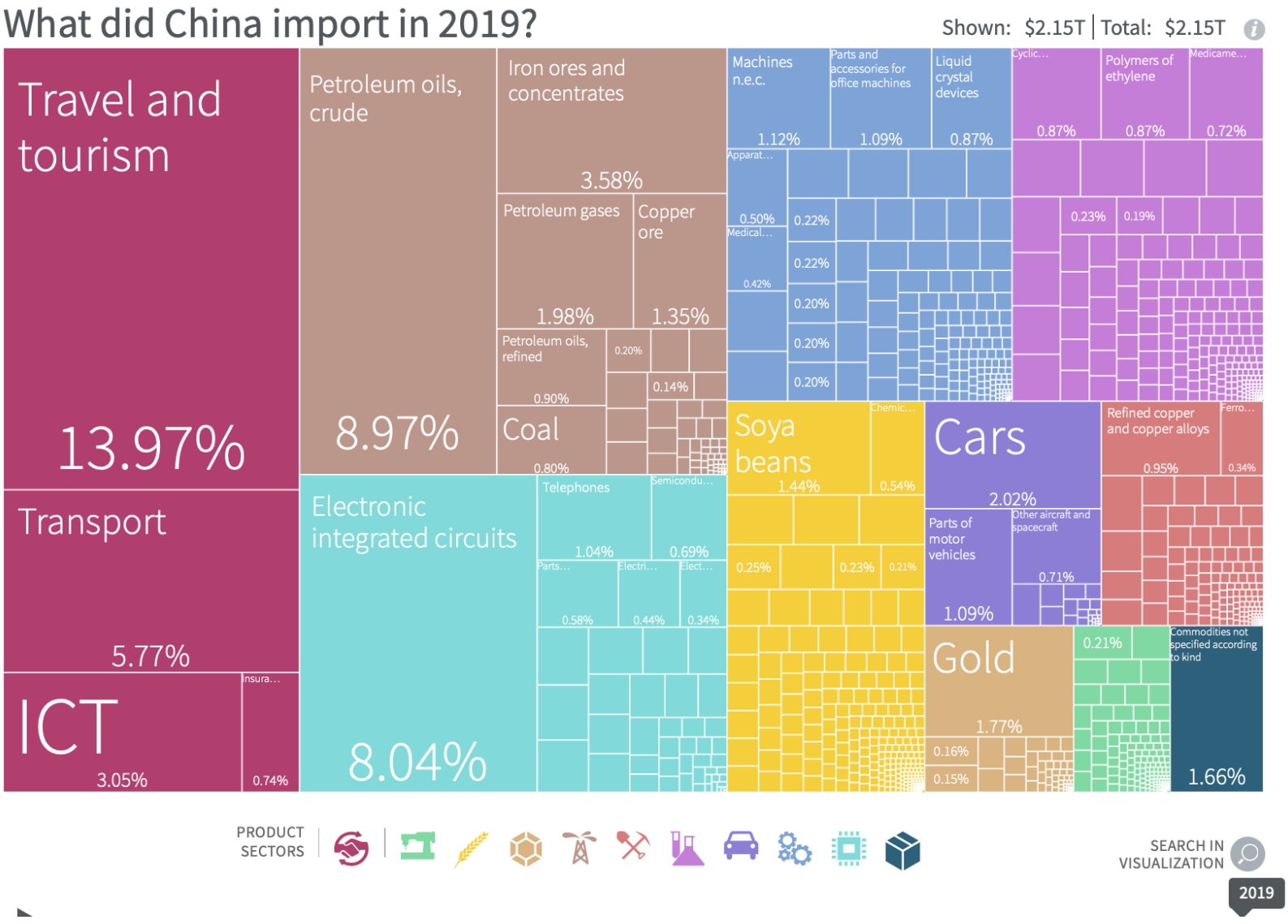
Usa 4/4


Where did United States of America import from in 2019?
Total/Shown: $2.33T
+ ZOOM
− ZOOM
RESET
Selected Country
$100k
$1M
$10M
$100M
$1B
$10B
$100B
$1T
2019

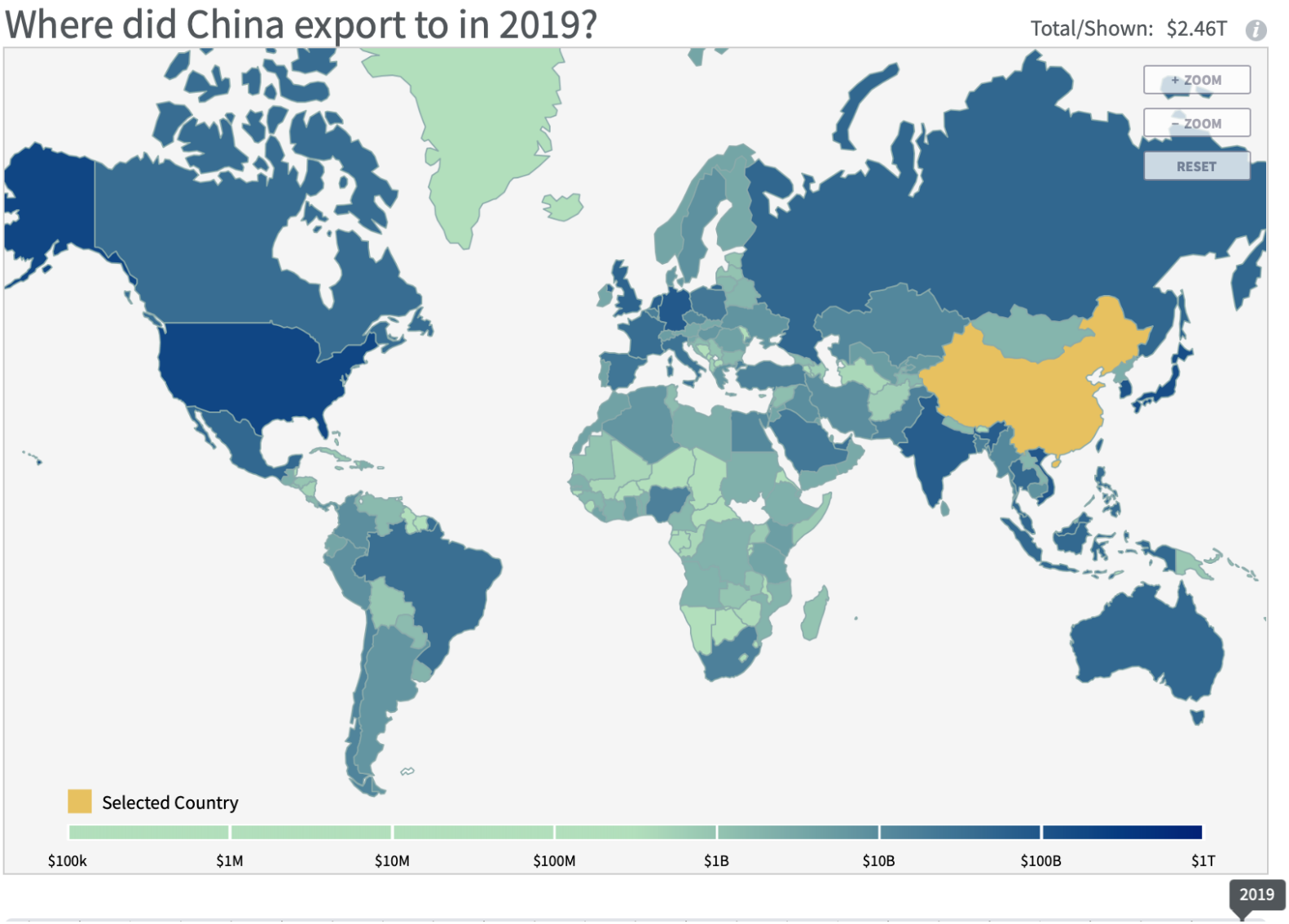
Cina 1/4


What did China export in 2019?
Shown: $2.70T | Total: $2.70T
Unspecified
3.86%
ICT
1.83%
Transport
1.71%
Travel and tourism
1.33%
0.32%
Transmission apparatus for radio, telephone and TV
6.77%
Electronic integrated circuits
3.92%
Telephones
1.89%
Semiconducto…
1.26%
Electrical…
1.05%
Monitors…
0.84%
Electrical machines with individual…
0.71%
Microphon…
0.60%
Batteries
0.60%
Insulated…
0.83%
Electric…
0.59%
Video…
0.51%
Electri…
0.42%
Electr…
0.40%
Electric heaters
0.76%
Electron…
0.57%
Electr…
0.34%
Parts…
0.53%
0.19%
0.17%
0.16%
0.15%
Computers
4.59%
Parts and accessories for office machines
2.74%
Toys
1.18%
Liquid crystal devices
0.78%
Pumps,…
0.59%
Air…
0.58%
Appliance…
0.56%
Games
0.46%
Sports…
0.41%
Machin…
0.39%
Refrig…
0.38%
0.15%
0.15%
Lamps
1.07%
Other furniture and parts
0.97%
Seats
0.92%
Other footwear of rubber or plastics
0.72%
Women's suits and pants
0.71%
Textile footwear
0.49%
Women's suits, knit
0.42%
Men's suits and pants
0.39%
Leathe…
0.35%
Mattr…
0.32%
Sweaters,…
0.65%
Woven fabrics of syntheti…
0.52%
Other knitted fabrics
0.52%
0.24%
0.24%
0.21%
0.21%
0.20%
0.19%
0.18%
Other articles of plastic
0.76%
New…
0.52%
Plast…
0.38%
0.21%
0.18%
0.18%
Structu…
0.48%
Flat rolled iron, width …
0.46%
0.23%
0.21%
0.16%
0.15%
0.15%
Parts of motor vehicles
1.14%
Cars
0.32%
Speci…
0.32%
Trunks or cases
0.95%
0.18%
0.19%
Petroleum oils, refined
1.33%
PRODUCT SECTORS
SEARCH IN VISUALIZATION
2019

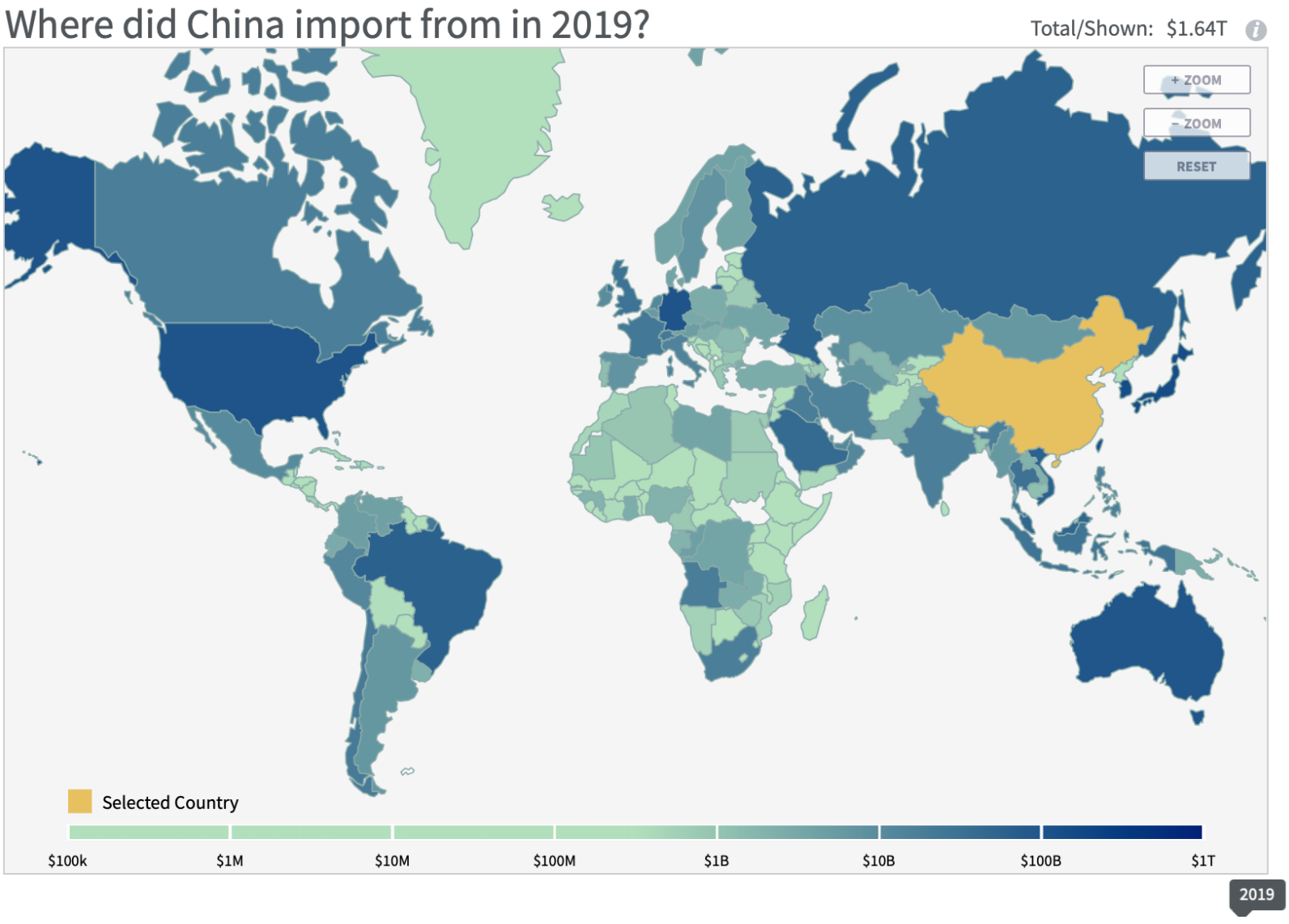
Cina 2/4


What did China import in 2019?
Shown: $2.15T | Total: $2.15T
Travel and tourism
13.97%
Transport
5.77%
ICT
3.05%
Insura…
0.74%
Petroleum oils, crude
8.97%
Iron ores and concentrates
3.58%
Petroleum gases
1.98%
Copper ore
1.35%
Petroleum oils, refined
0.90%
0.20%
0.14%
Coal
0.80%
Electronic integrated circuits
8.04%
Telephones
1.04%
Semicondu…
0.69%
Parts…
0.58%
Electri…
0.44%
Elect…
0.34%
Machines n.e.c.
1.12%
Parts and accessories for office machines
1.09%
Liquid crystal devices
0.87%
Apparat…
0.50%
Medical…
0.42%
0.22%
0.22%
0.20%
0.20%
0.20%
Cyclic…
0.87%
Polymers of ethylene
0.87%
Medicame…
0.72%
0.23%
0.19%
Soya beans
1.44%
Chemic…
0.54%
0.25%
0.23%
0.21%
Cars
2.02%
Parts of motor vehicles
1.09%
Other aircraft and spacecraft
0.71%
Refined copper and copper alloys
0.95%
Ferro…
0.34%
Gold
1.77%
0.16%
0.15%
0.21%
Commodities not specified according to kind
1.66%
PRODUCT SECTORS
SEARCH IN VISUALIZATION
2019

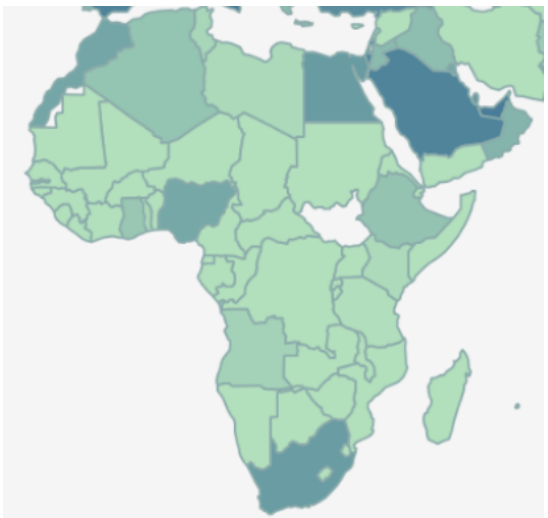
Cina 3/4

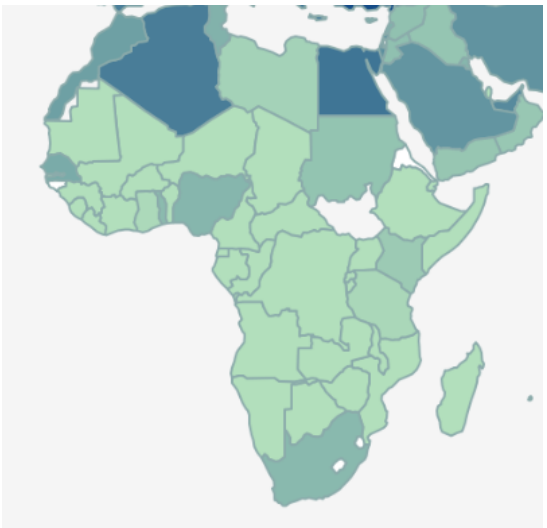

Where did China export to in 2019?
Total/Shown: $2.46T
+ ZOOM
- ZOOM
RESET
Selected Country
$100k
$1M
$10M
$100M
$1B
$10B
$100B
$1T
2019

Cina 4/4


Where did China import from in 2019?
Total/Shown: $1.64T
+ ZOOM
- ZOOM
RESET
Selected Country
$100k
$1M
$10M
$100M
$1B
$10B
$100B
$1T
2019

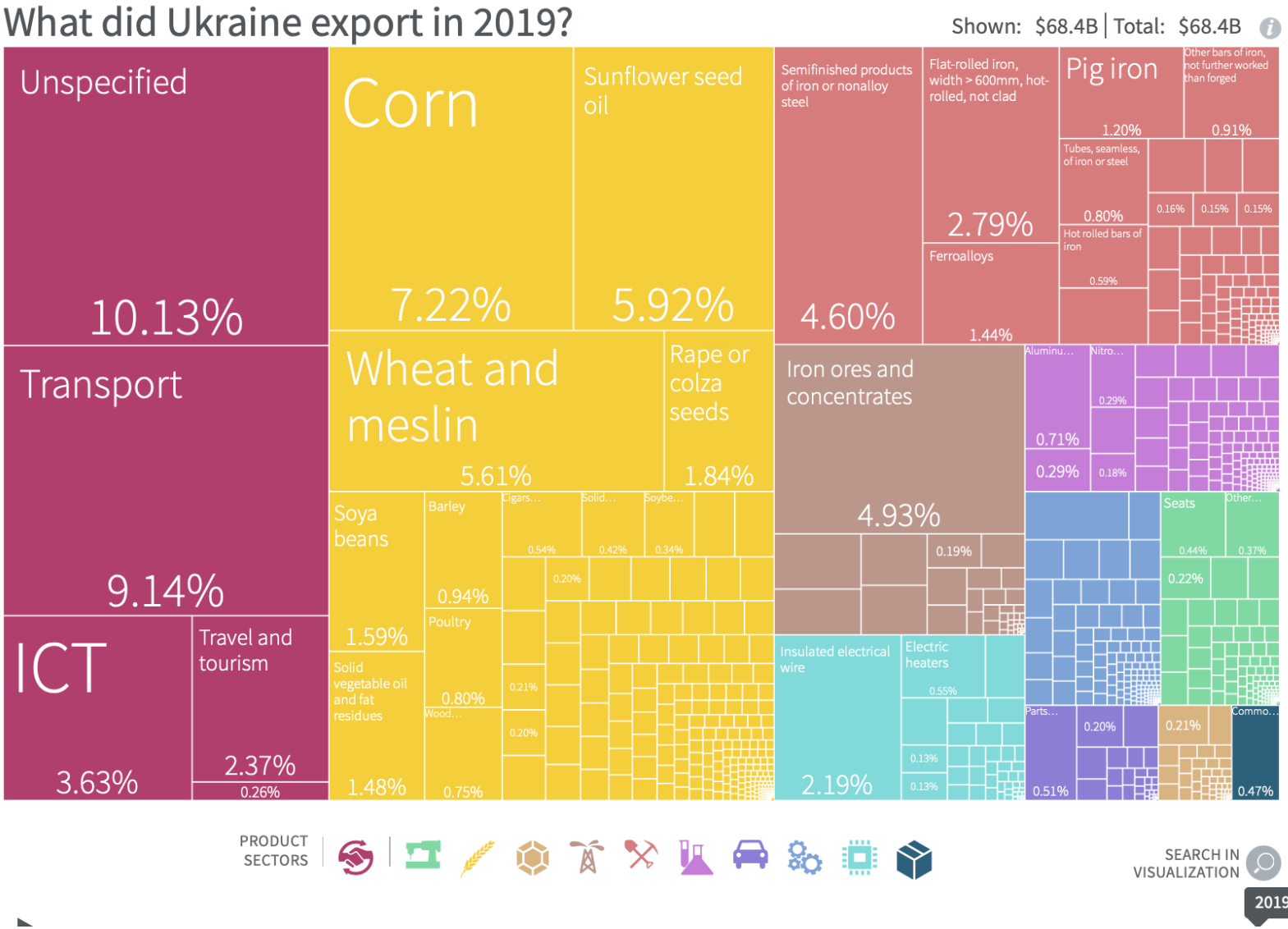
USA, Russia e Cina vs. Africa – Export



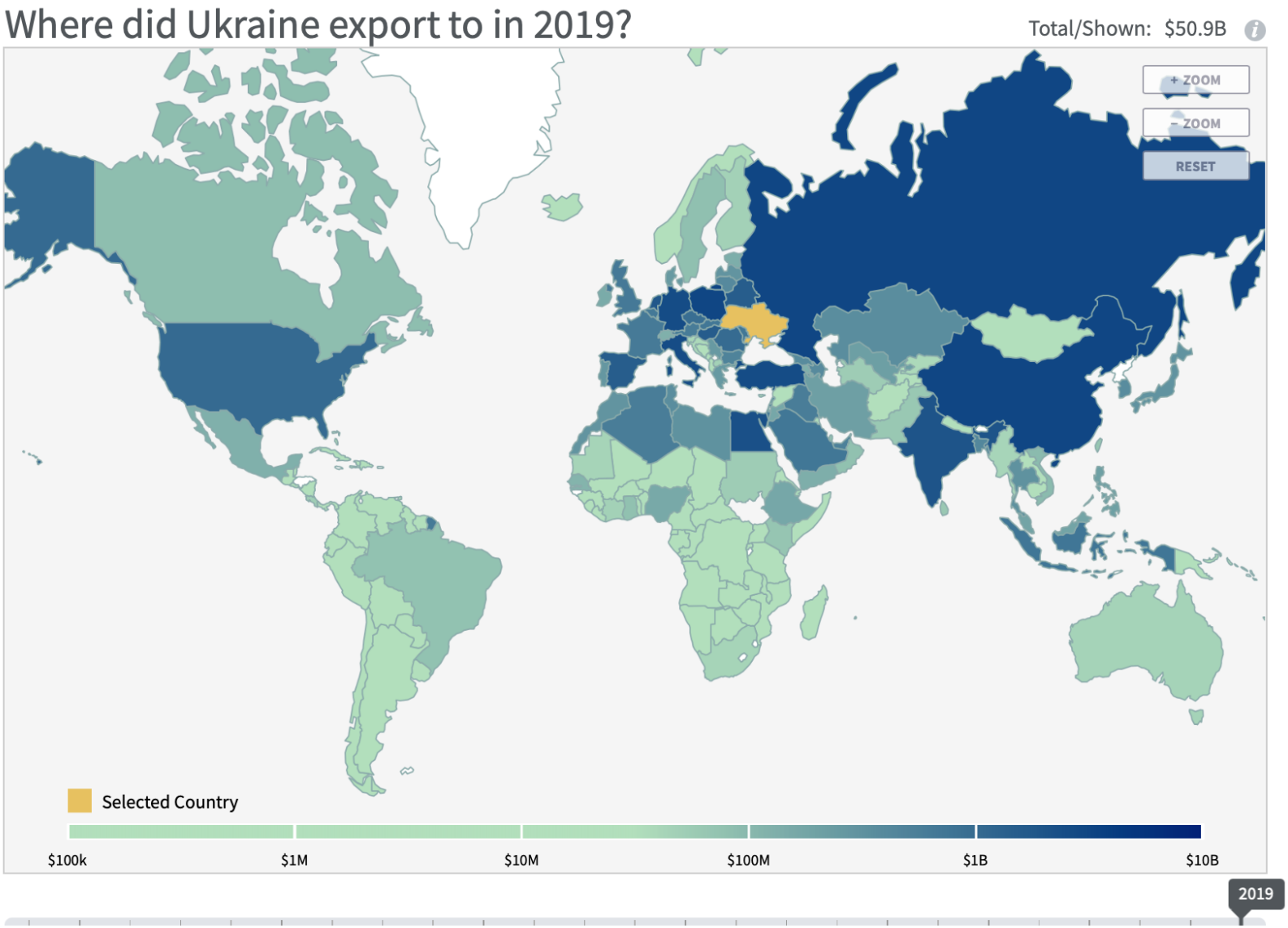


USA, Russia e Cina vs. Africa – Import

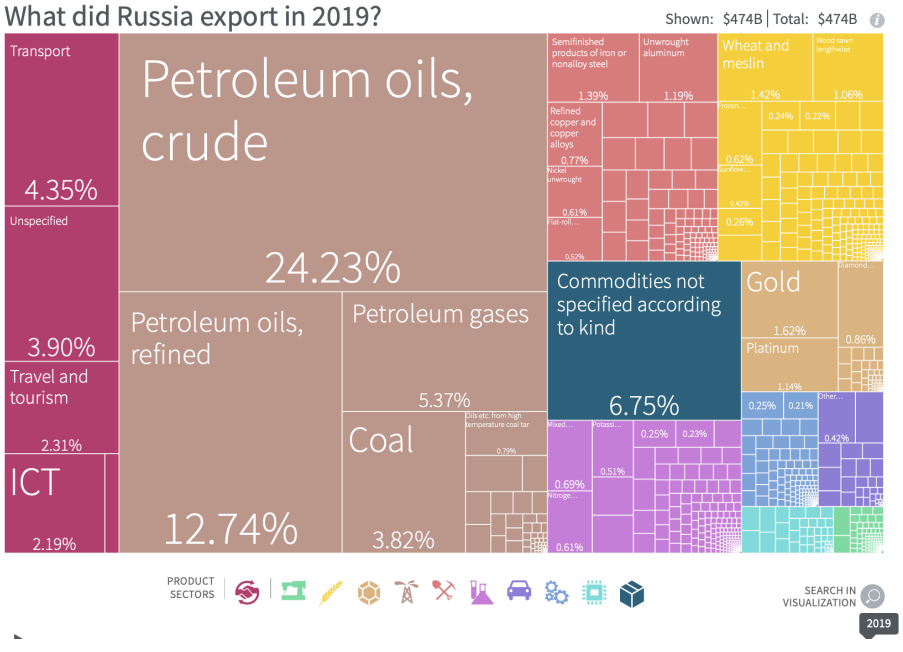
Ucraina 1/2

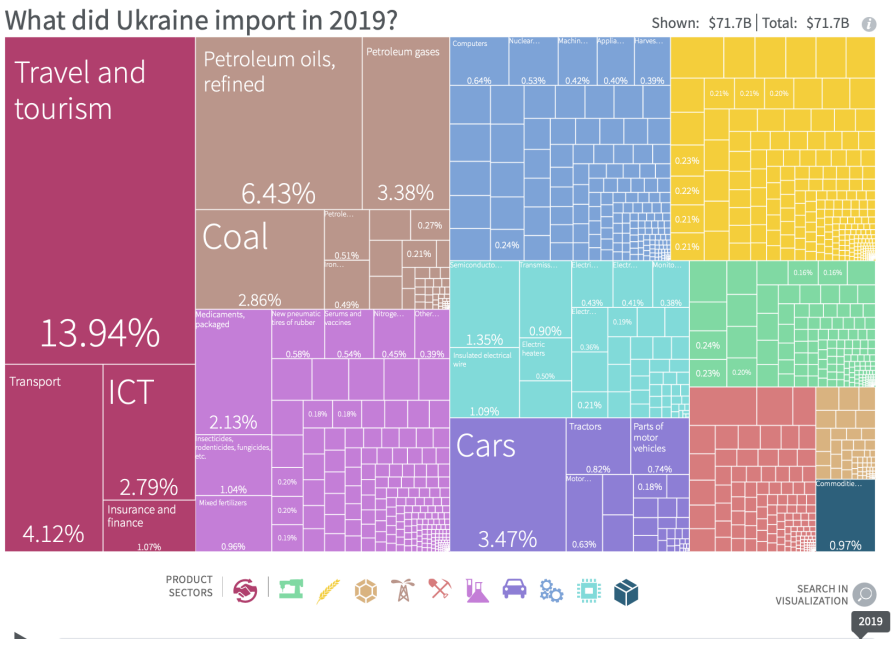

What did Ukraine export in 2019?
Shown: $68.4B | Total: $68.4B
Unspecified 10.13%
Transport 9.14%
ICT 3.63%
Travel and tourism 2.37%
0.26%
Corn 7.22%
Sunflower seed oil 5.92%
Wheat and meslin 5.61%
Rape or colza seeds 1.84%
Soya beans 1.59%
Solid vegetable oil and fat residues 1.48%
Barley 0.94%
Poultry 0.80%
Wood... 0.75%
Cigars... 0.54%
Solid... 0.42%
Soybe... 0.34%
0.20%
0.21%
0.20%
Semifinished products of iron or nonalloy steel 4.60%
Flat-rolled iron, width > 600mm, hot-rolled, not clad 2.79%
Ferroalloys 1.44%
Pig iron 1.20%
Other bars of iron, not further worked than forged 0.91%
Tubes, seamless, of iron or steel 0.80%
Hot rolled bars of iron 0.59%
0.16%
0.15%
0.15%
Iron ores and concentrates 4.93%
0.19%
Insulated electrical wire 2.19%
Electric heaters 0.55%
0.13%
0.13%
Aluminu... 0.71%
0.29%
Nitro... 0.29%
0.18%
Parts... 0.51%
0.20%
Seats 0.44%
Other... 0.37%
0.22%
0.21%
Commo... 0.47%
PRODUCT SECTORS
SEARCH IN VISUALIZATION
2019

Ucraina 2/2

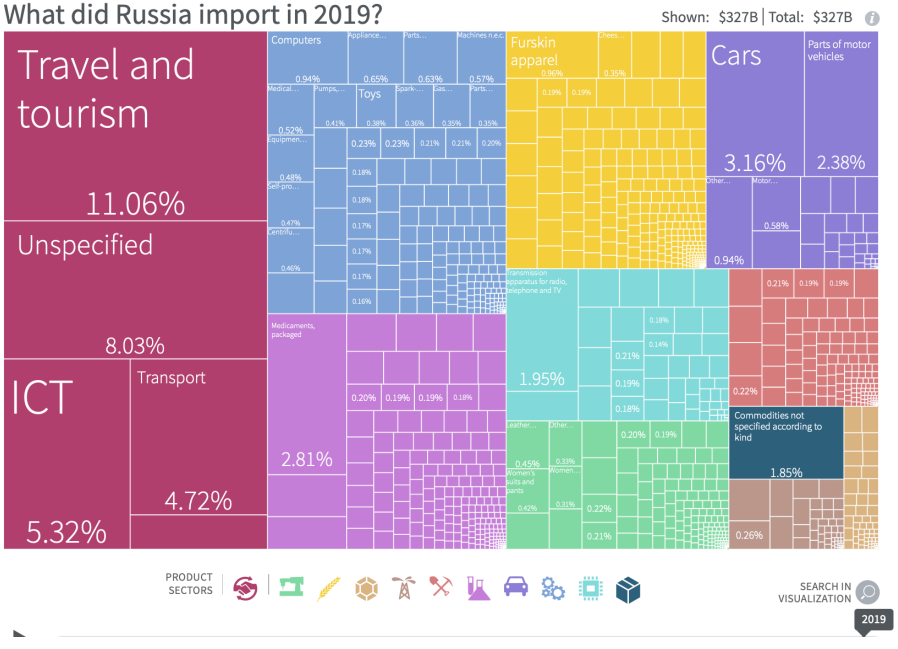

Where did Ukraine export to in 2019?
Total/Shown: $50.9B
+ ZOOM
− ZOOM
RESET
Selected Country
$100k
$1M
$10M
$100M
$1B
$10B
2019

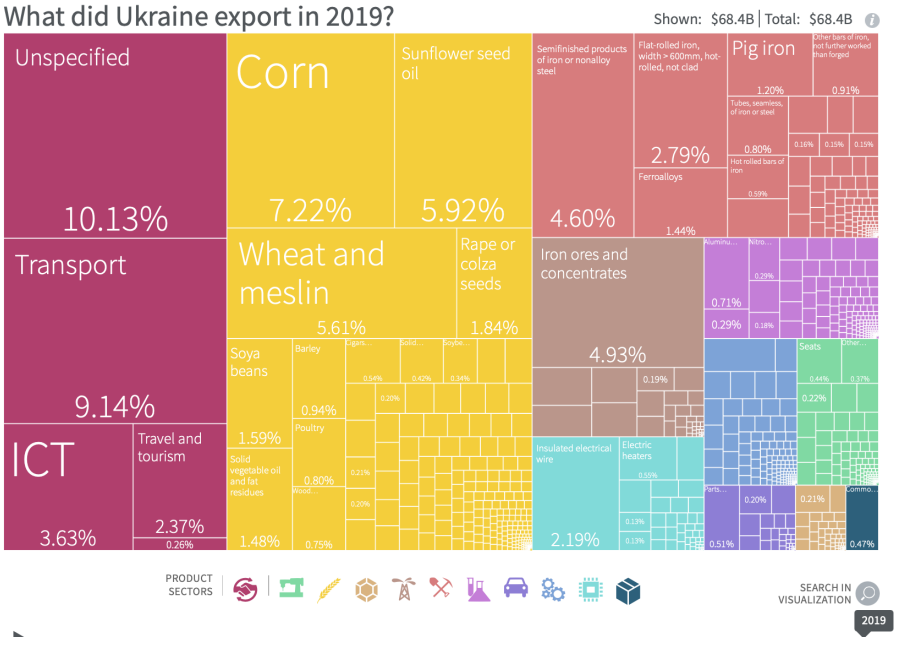
Complementarità Russia–Ucraina 1/2





Complementarità Russia–Ucraina 2/2



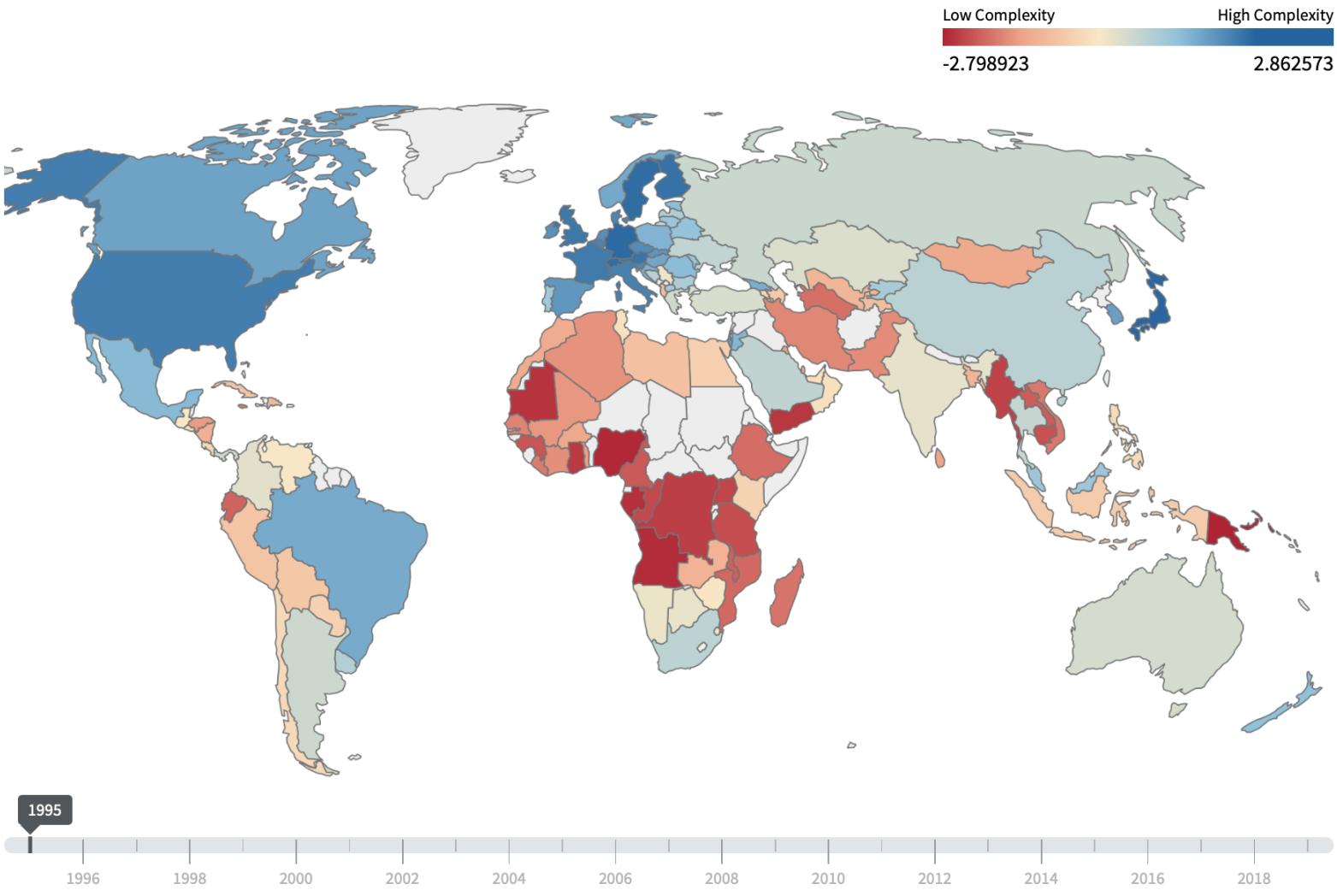


Tre fattori per ridurre le 256 volte

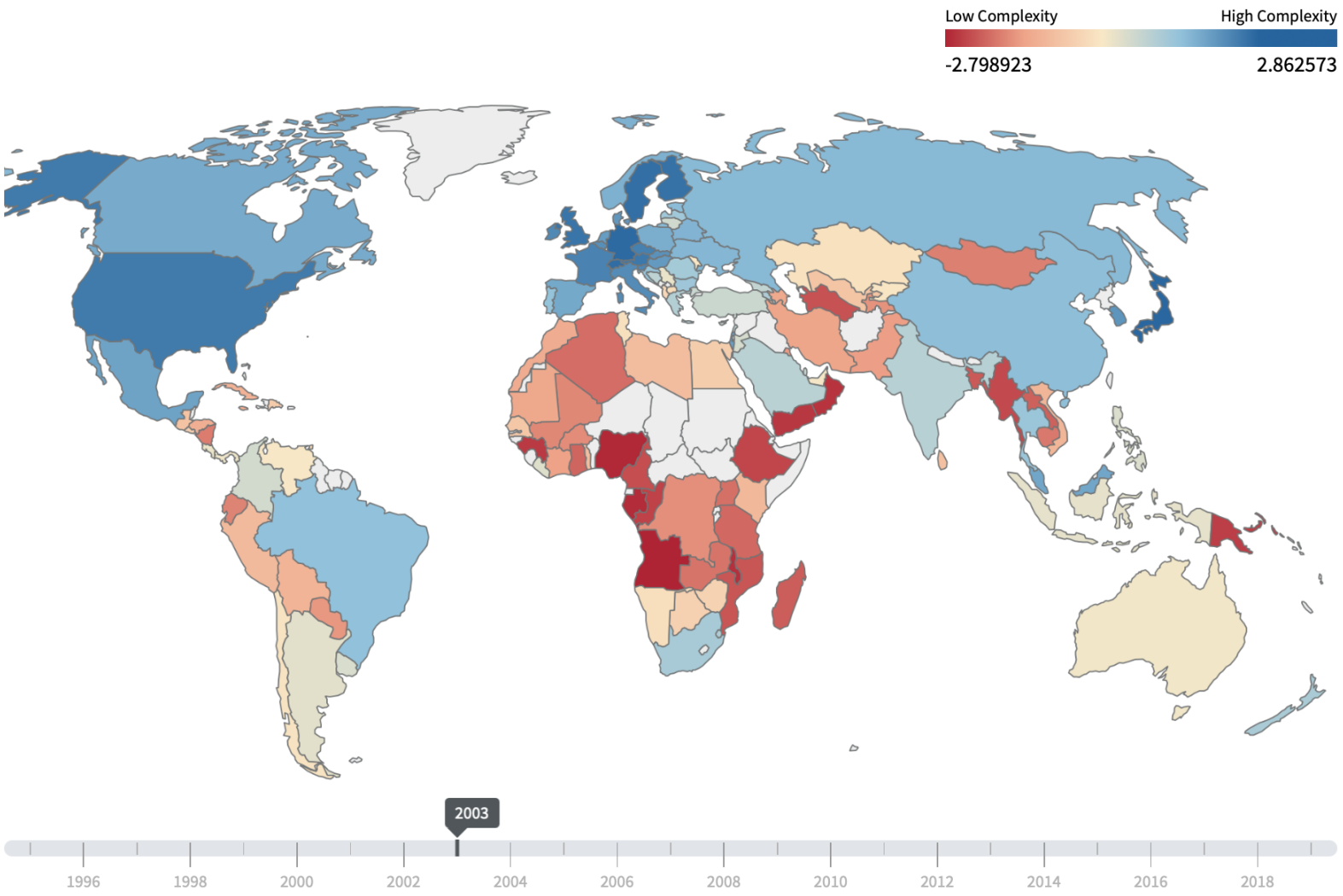
- La tecnologia è rappresentabile come informazione, algoritmi, formule, schemi, tutto in forma sempre più accessibile in tutto il mondo.
- La tecnologia si materializza negli strumenti, per lo più accessibili.
- Però la somma di informazioni e strumenti raramente produce un risultato concreto. Manca il "sapere comune nel fare", il *know-how*.
- Complessità incorporata nei prodotti.

Esploriamo https://atlas.cid.harvard.edu/rankings
(clic su GeoMap).

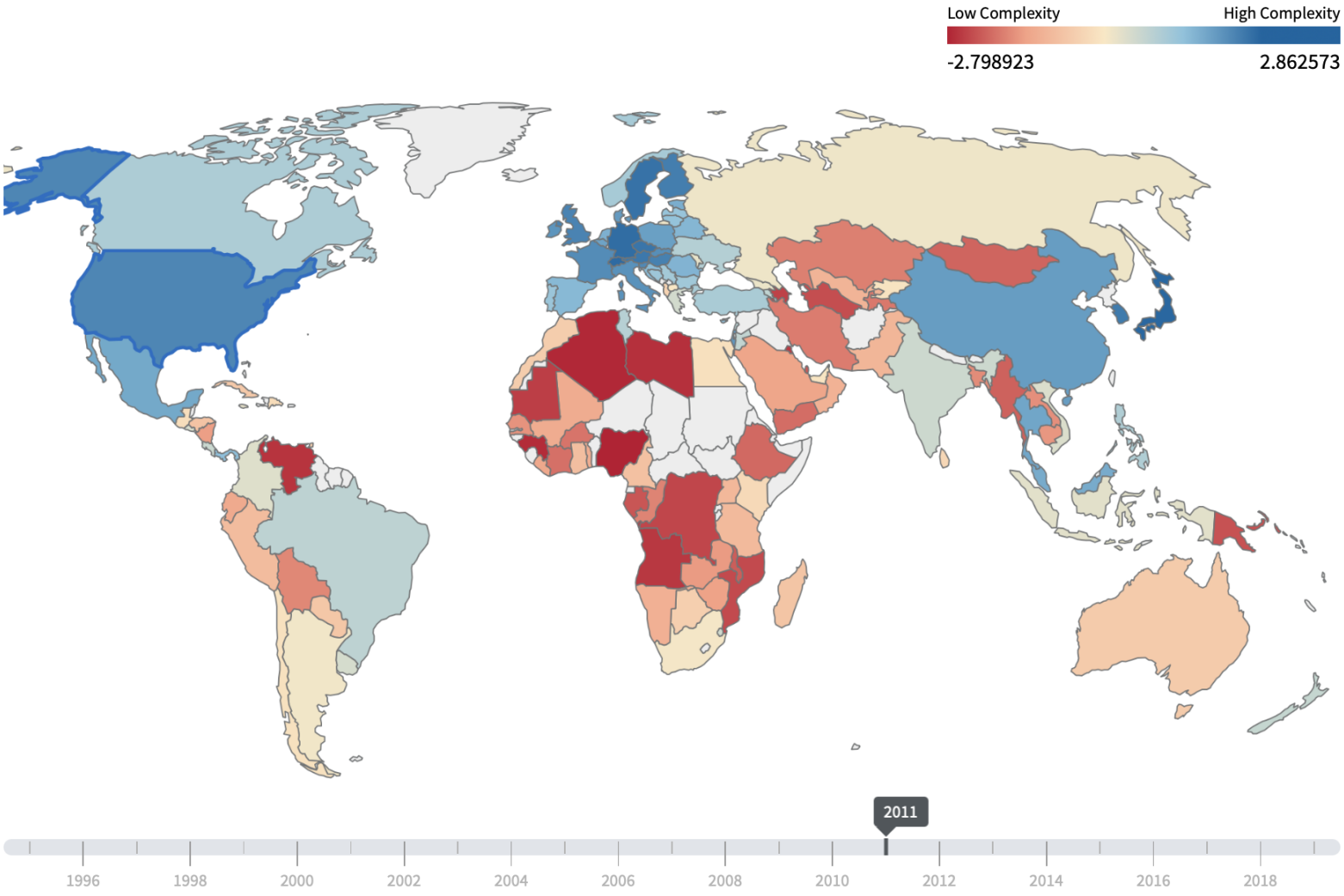
RODUCT COMPLEXITY RANKING 1/4



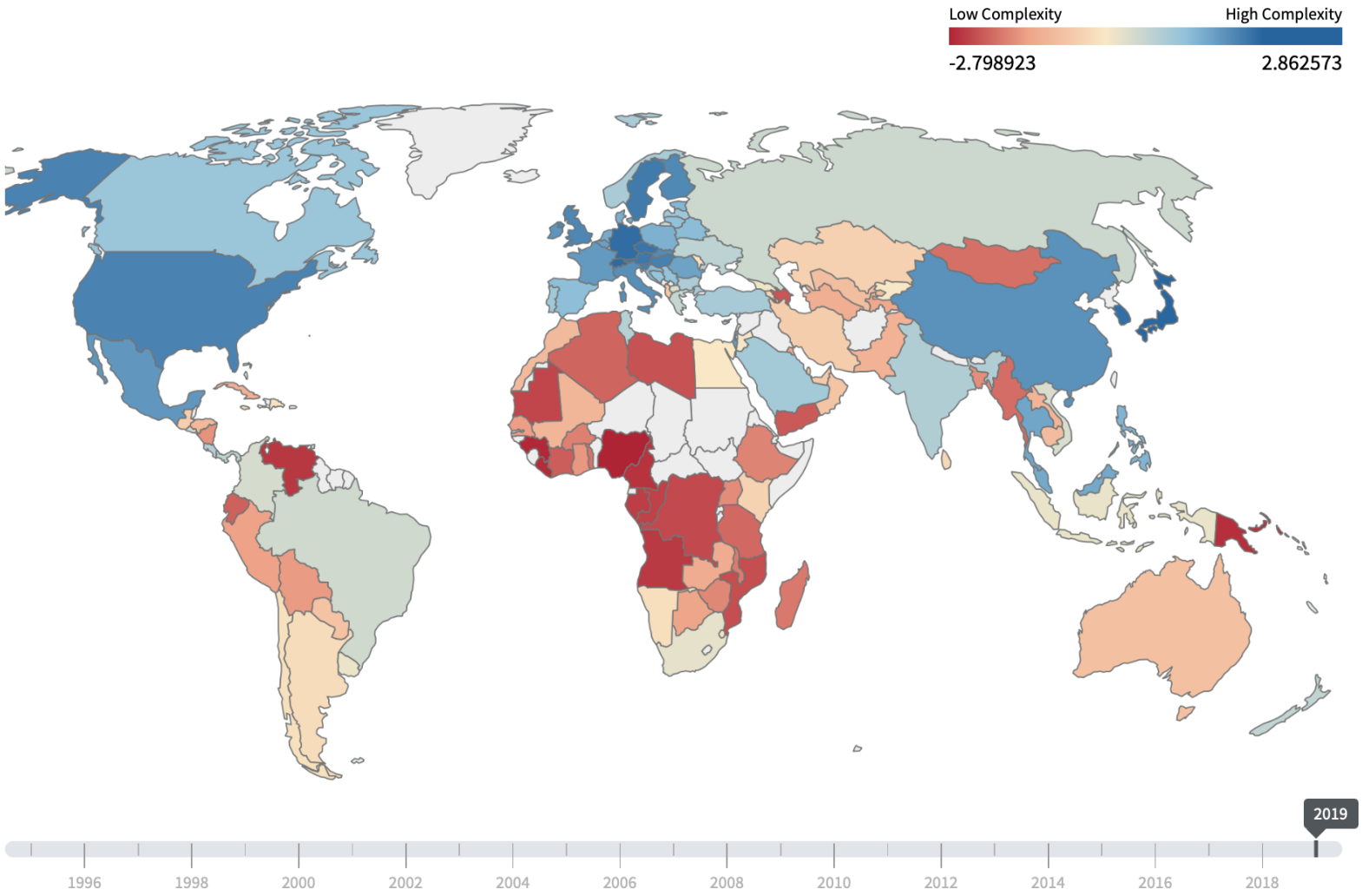
RODUCT COMPLEXITY RANKING 2/4



RODUCT COMPLEXITY RANKING 3/4



RODUCT COMPLEXITY RANKING 4/4



Grazie.

Slide a https://terna.to.it/aa2022.pdf.

Mio sito web https://terna.to.it

Indirizzo pietro.terna@unito.it