

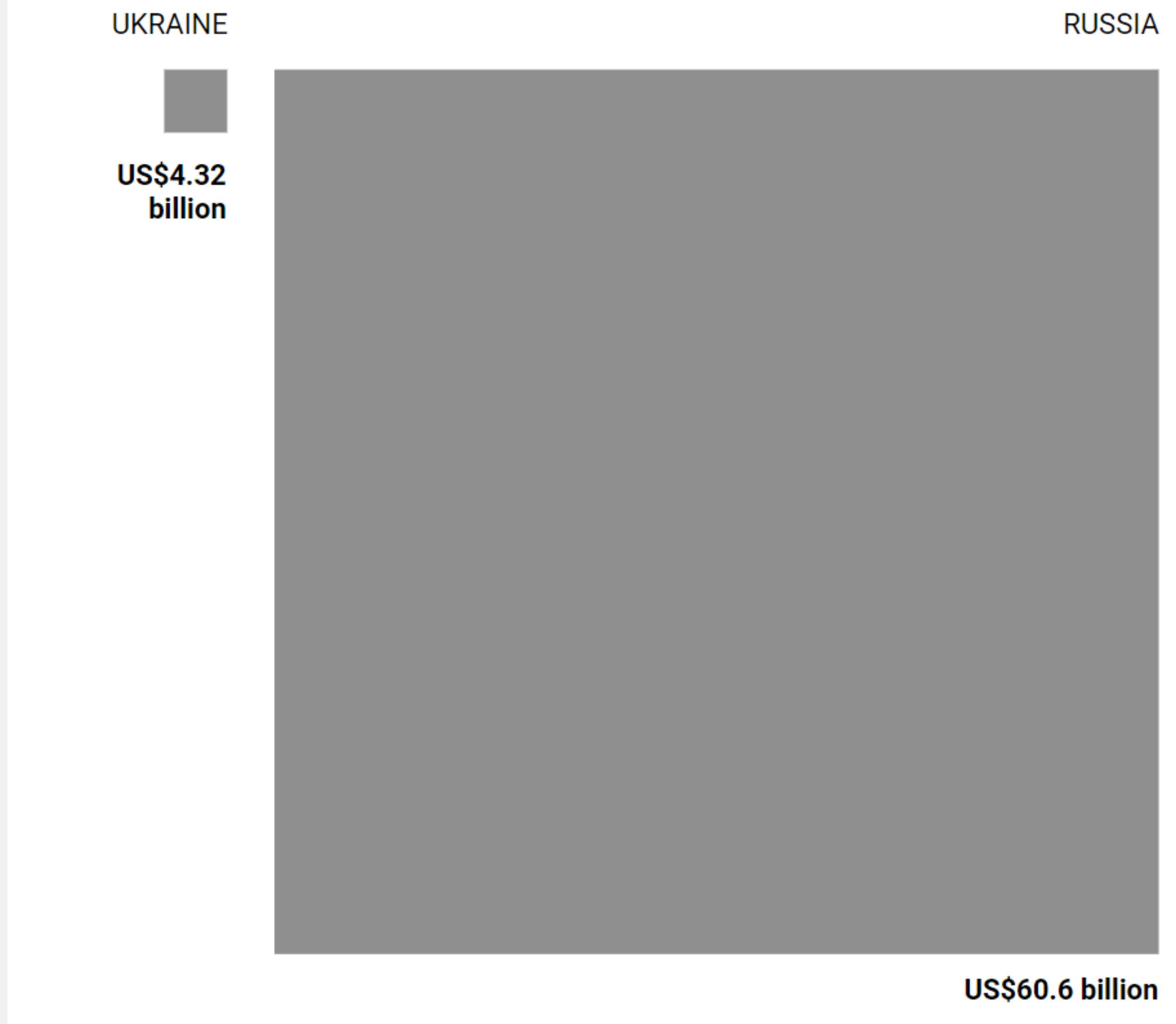
Data Communication

Exercise

Cédric Scherer // rstudio::conf // July 2022

DEFENCE BUDGETS: RUSSIA VS UKRAINE (2020)

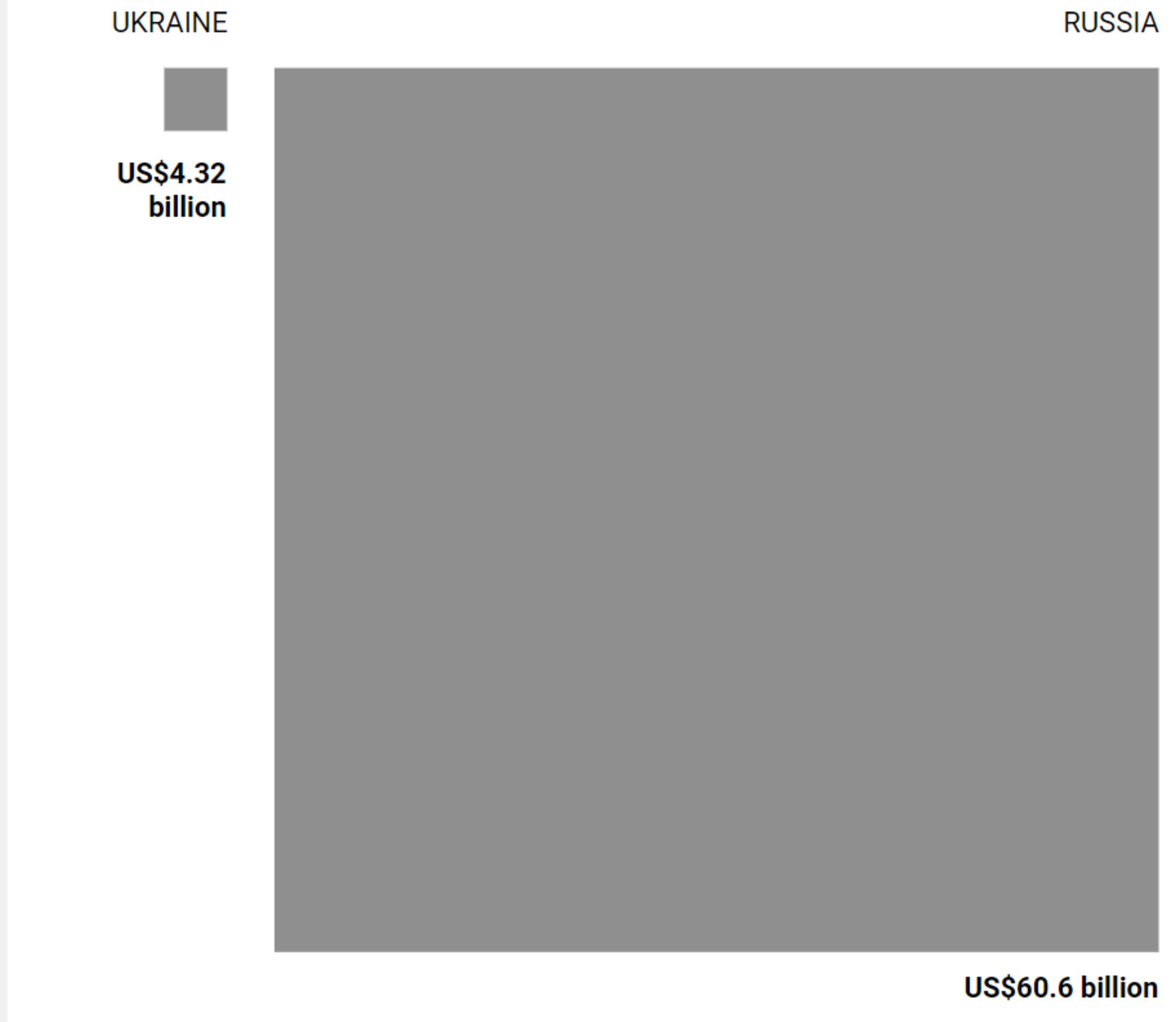
The national balance of forces is overwhelmingly in Russia's favour. Russian military spending in 2020 amounted to US\$60.6 billion in 2020. Ukraine's was less than a 10th of that amount.



[“Russia attacks Ukraine” by SCMP Graphic \(South China Morning Post\)](#)

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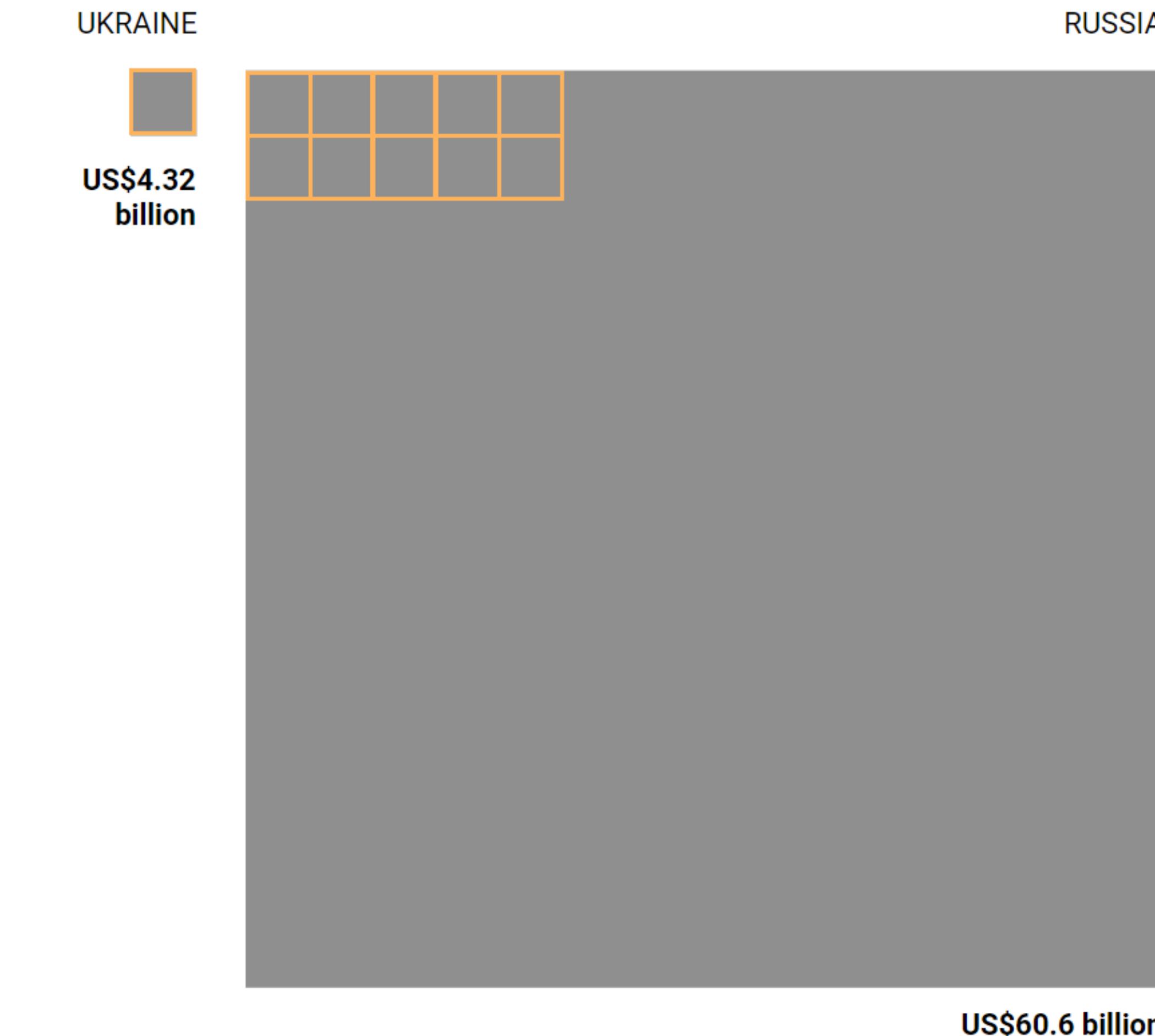
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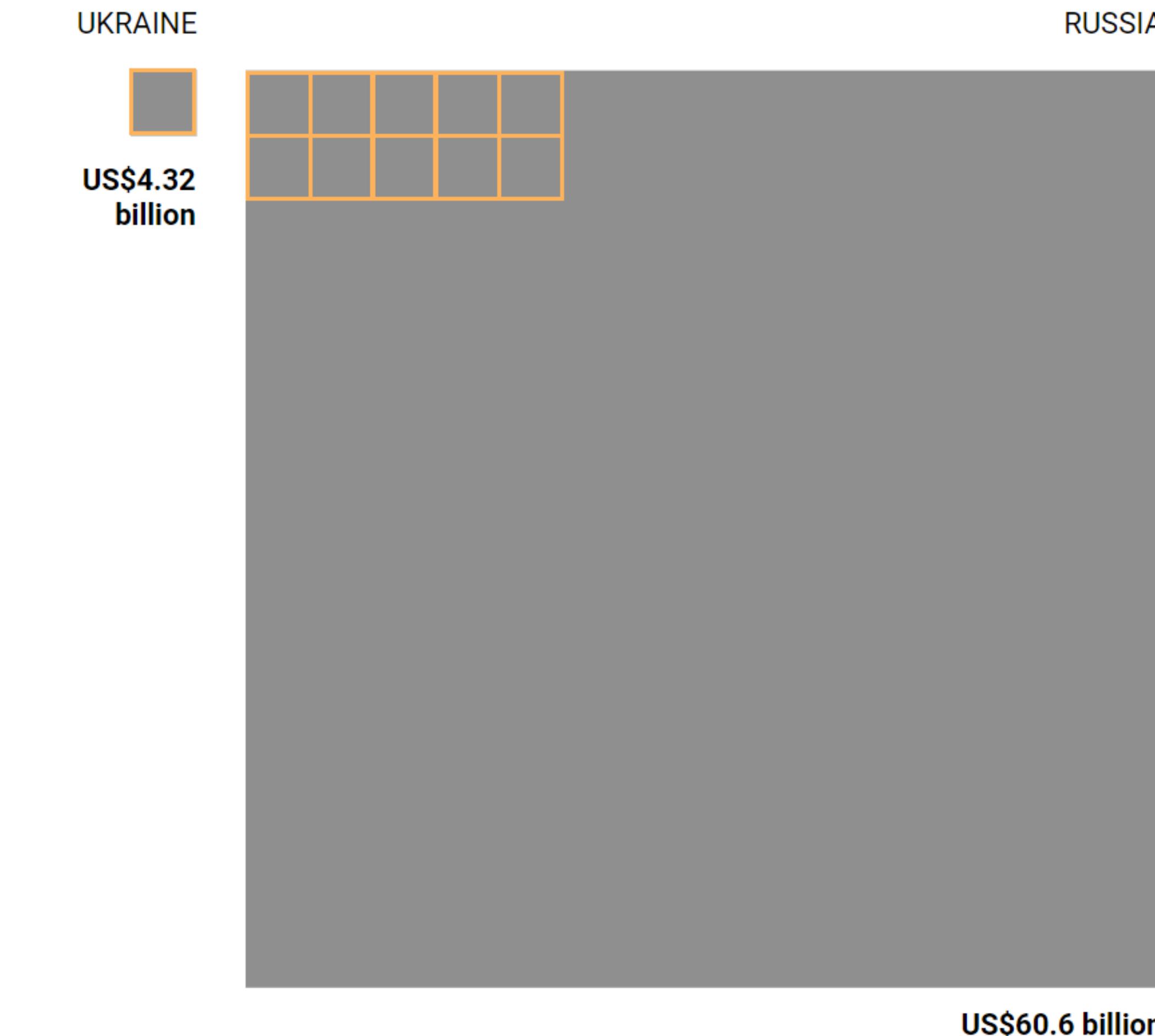
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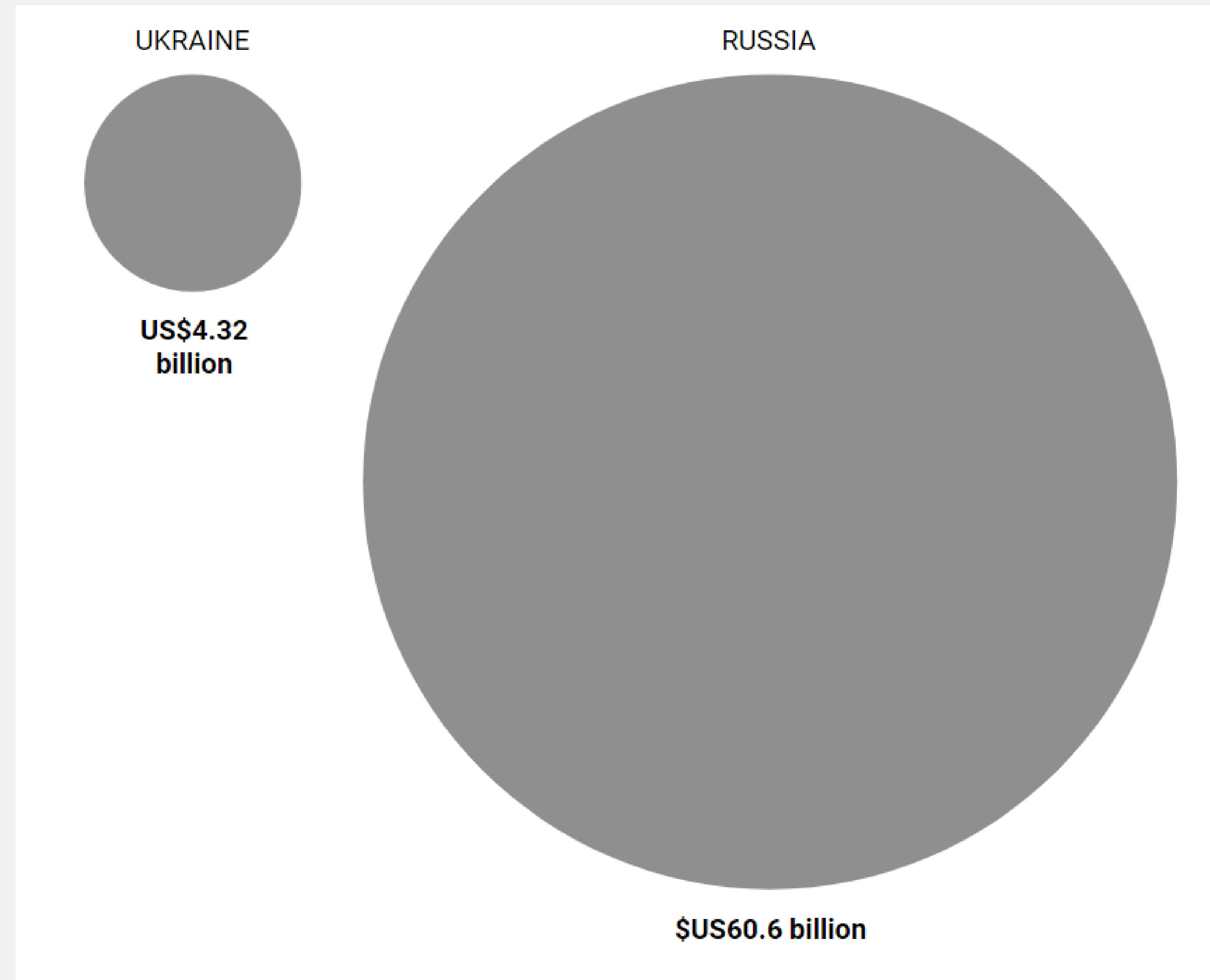
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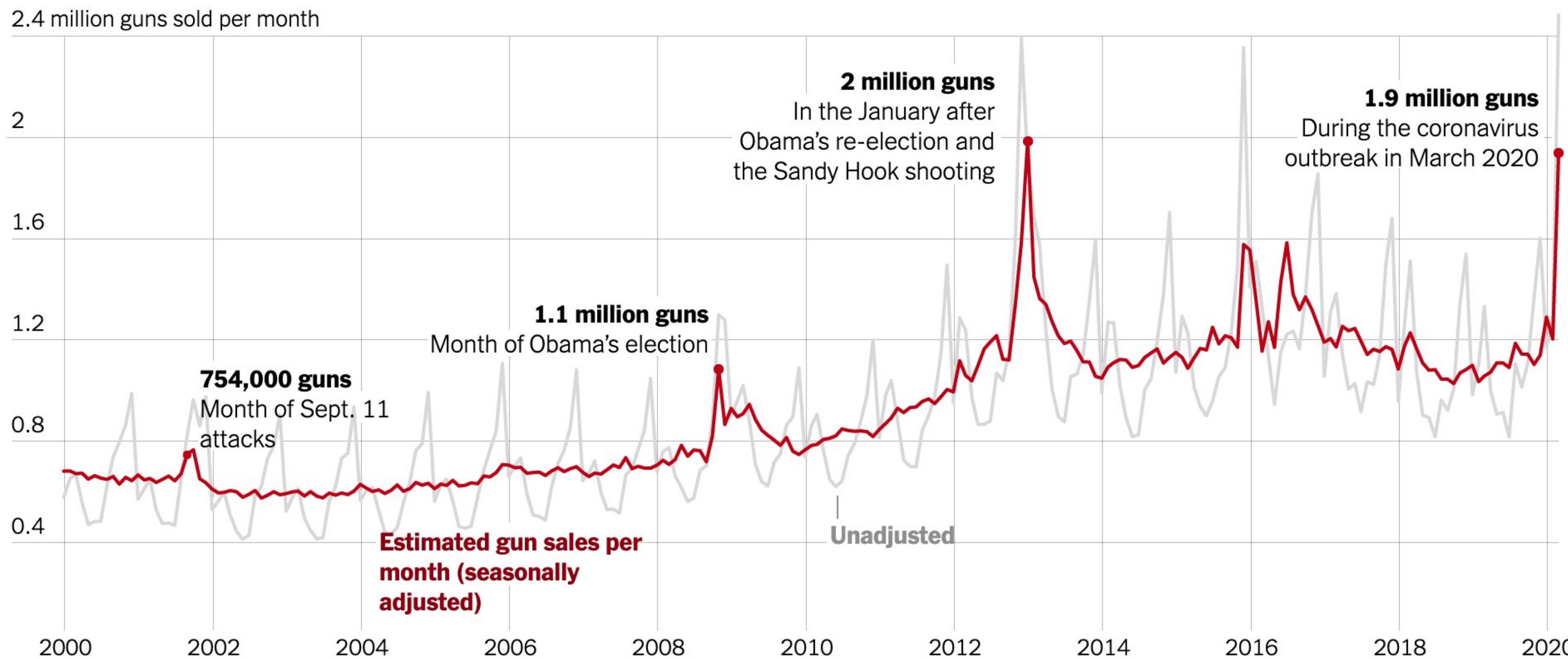
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About 2 Million Guns Were Sold in the U.S. as Virus Fears Spread

By [Keith Collins](#) and [David Yaffe-Bellany](#) April 1, 2020

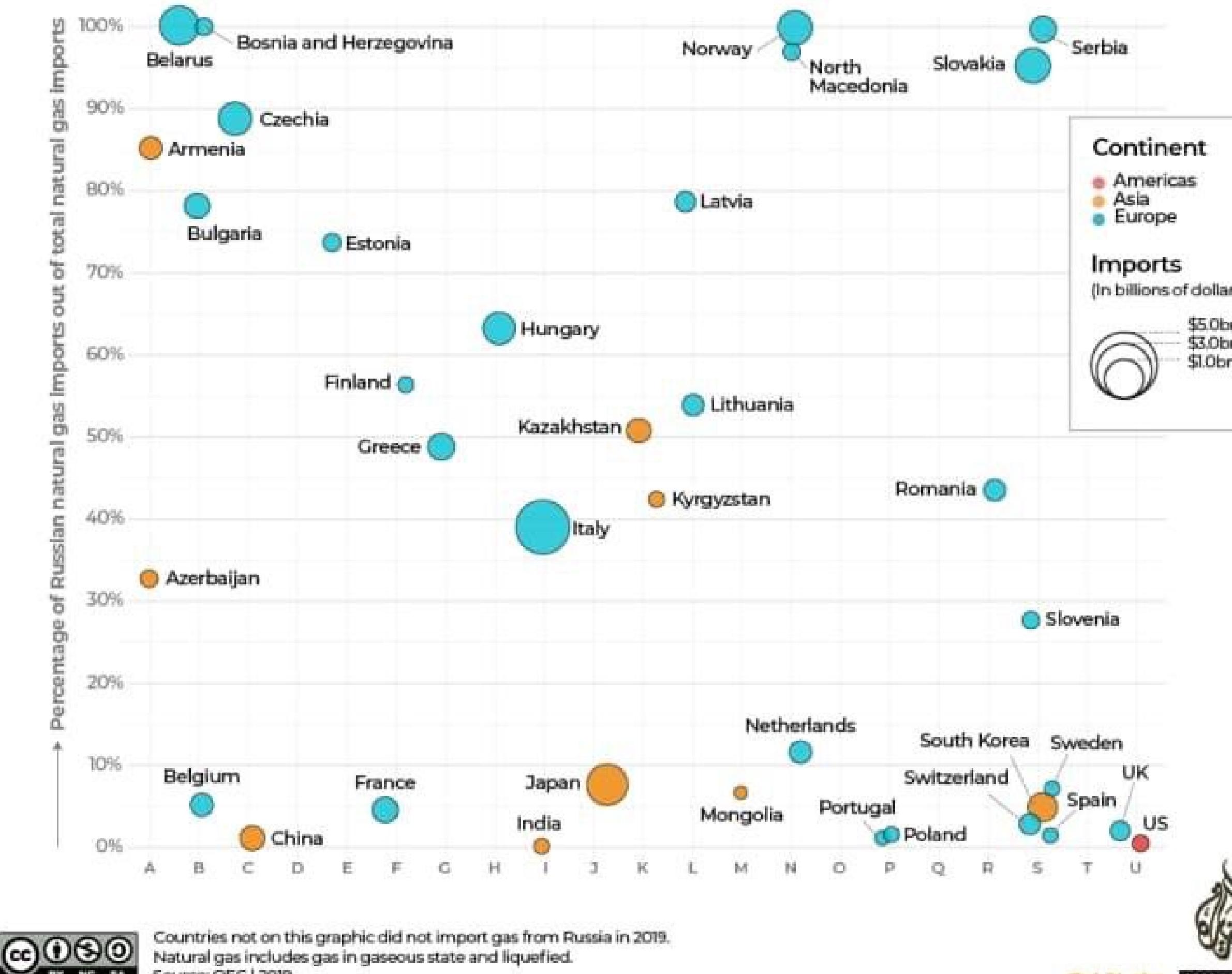


["About 2 Million Guns Were Sold in the U.S. as Virus Feats Spread"](#) by Keith Collins and David Yaffe-Bellany (New York Times)

ENERGY

Which countries directly import the most Russian natural gas?

Russia is the world's third highest exporter of natural gas after Australia and Qatar.
In 2019, 37 countries bought Russian gas worth \$24.5bn.

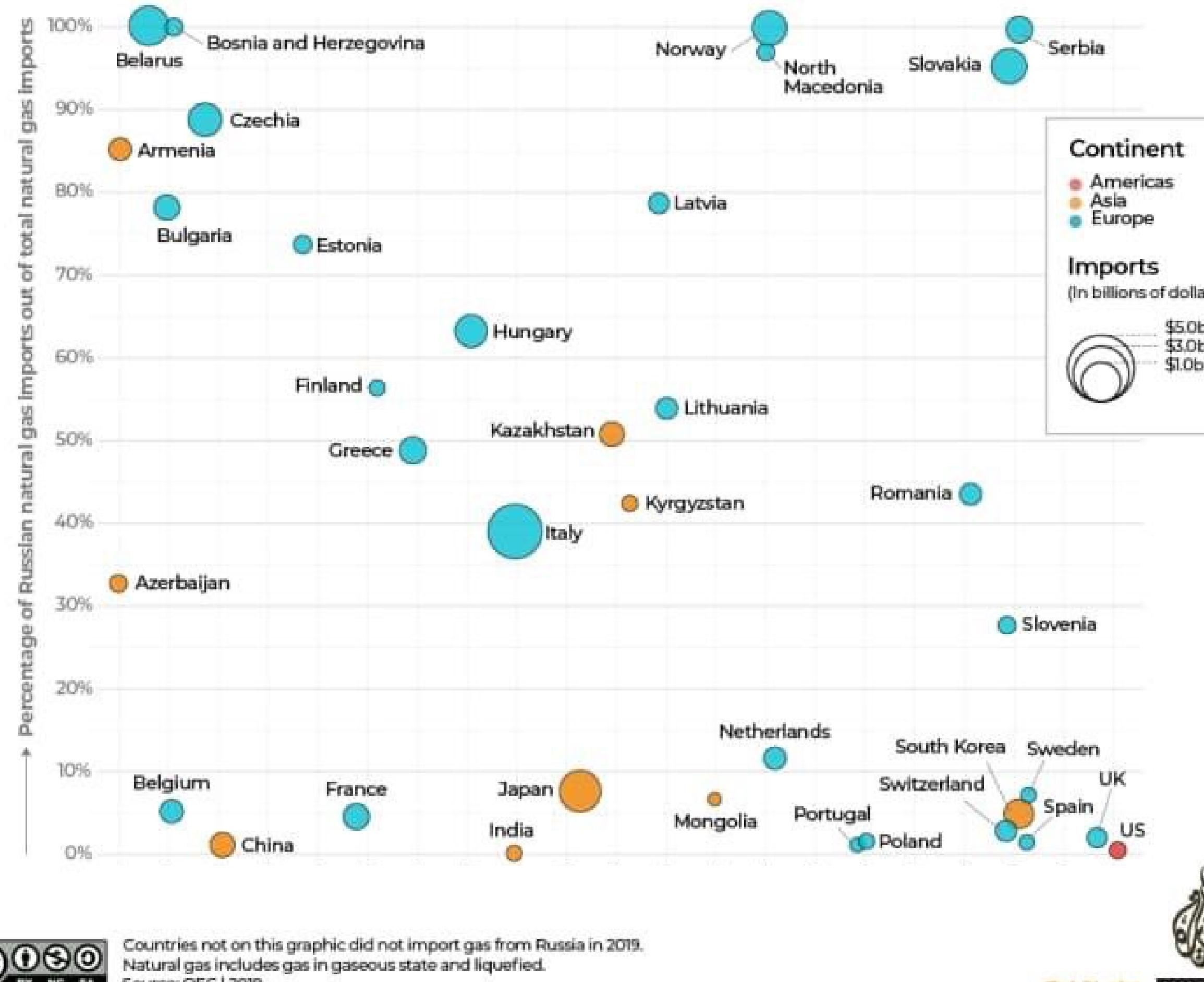


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ENERGY

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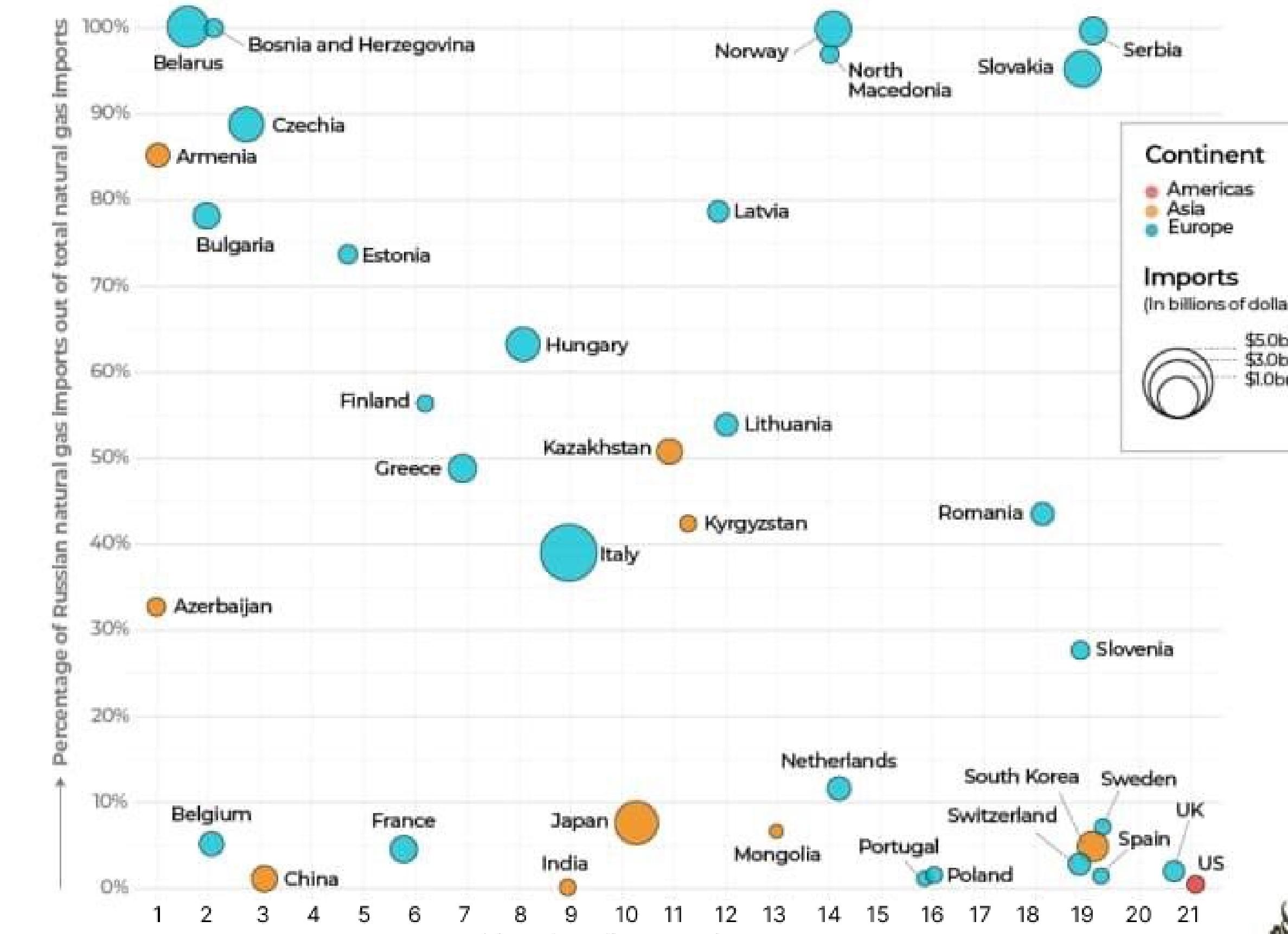
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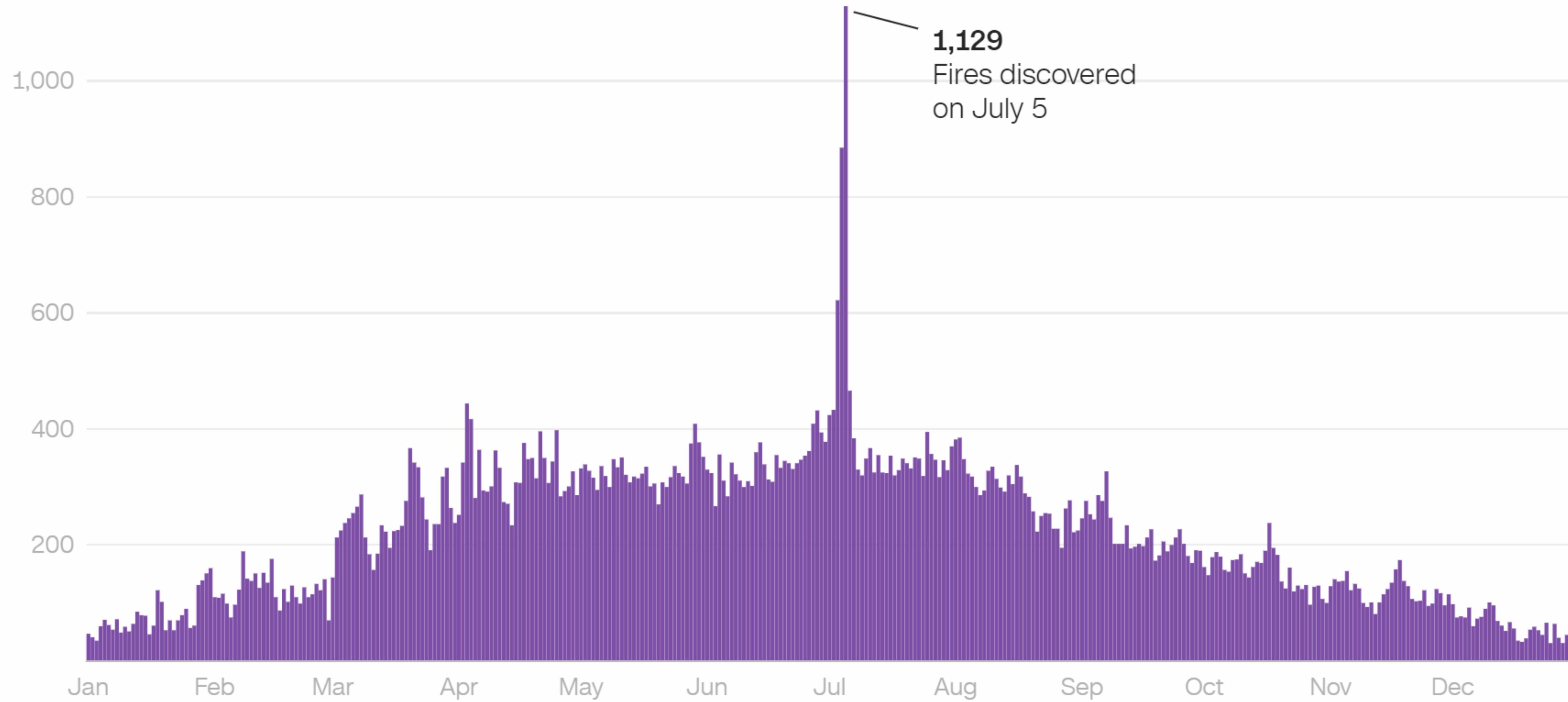


Countries not on this graphic did not import gas from Russia in 2019.
Natural gas includes gas in gaseous state and liquefied.
Source: OEC | 2019



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Total wildfires discovered each day of the year since 2014



Human-caused fires, excluding prescribed fires. 2022 fires included through June 30. All incident times Eastern.

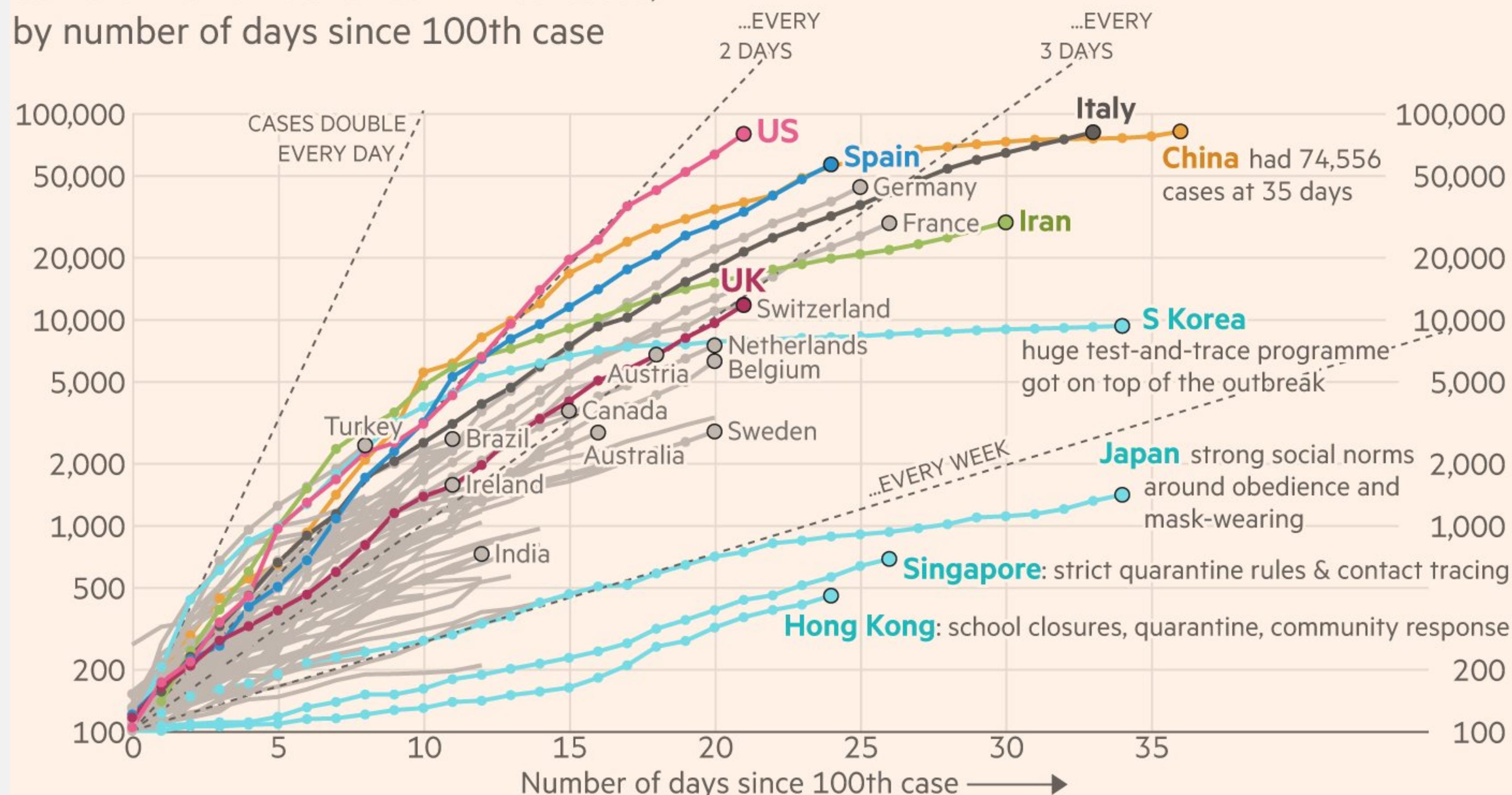
Sources: CNN analysis of data from the National Interagency Fire Center

Graphic: John Keefe, CNN

[“Western cities get creative after megadrought leads some to cancel firework displays” by John Keefe \(CNN\)](#)

Most western countries are on the same coronavirus trajectory. Hong Kong and Singapore have limited the spread; Japan and S Korea have slowed it

Cumulative number of confirmed cases,
by number of days since 100th case



FT graphic: John Burn-Murdoch / @jburnmurdoch

Source: FT analysis of Johns Hopkins University, CSSE; Worldometers; FT research. Data updated March 26, 19:00 GMT

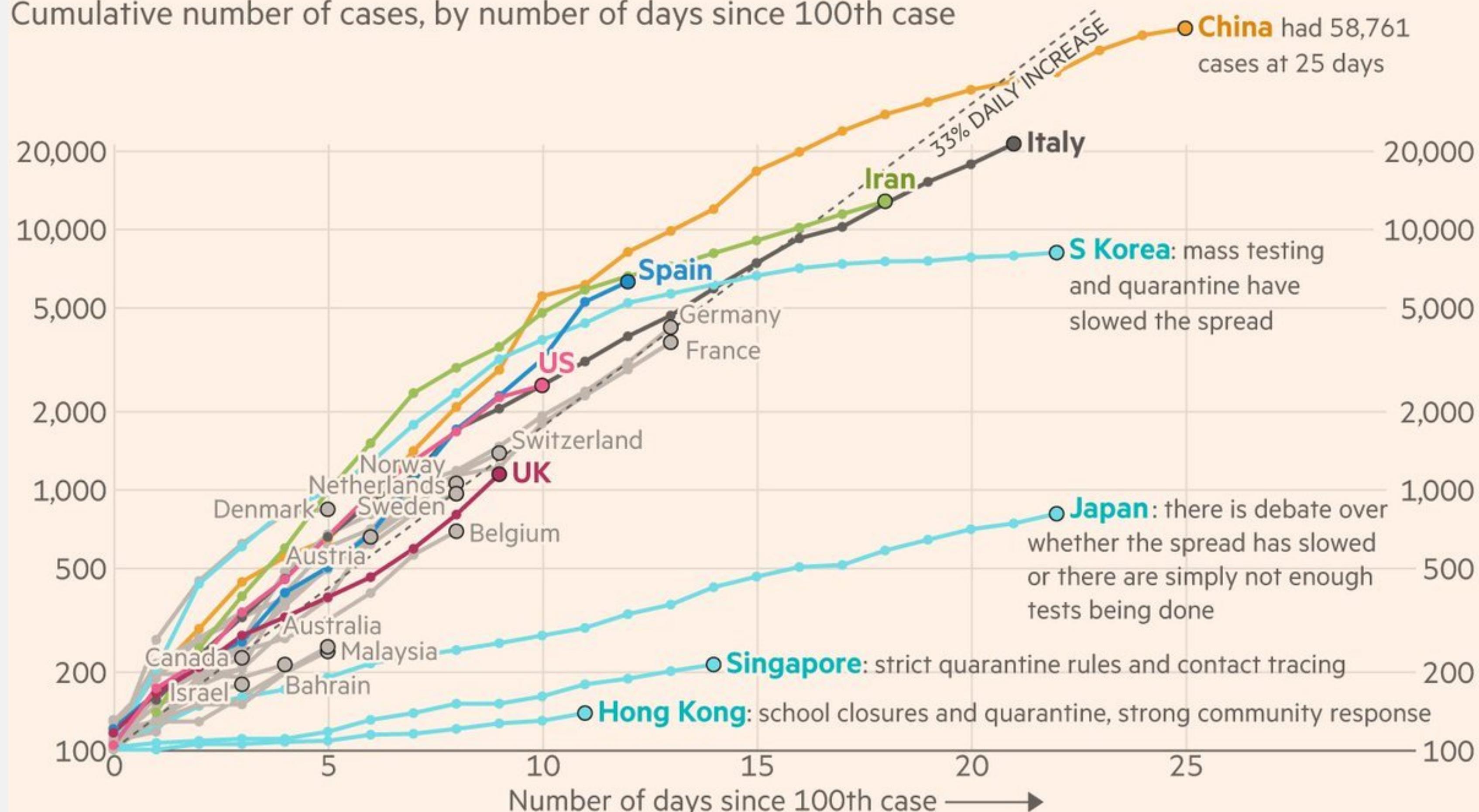
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COVID Trajectories by John Burn-Murdoch (Financial Times)

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Most western countries are on the same coronavirus trajectory. Hong Kong and Singapore have so far limited the spread; S Korea is slowing its progress

Cumulative number of cases, by number of days since 100th case



FT graphic: John Burn-Murdoch / @jburnmurdoch

Source: FT analysis of Johns Hopkins University, CSSE. Data updated March 14, 19:00 GMT

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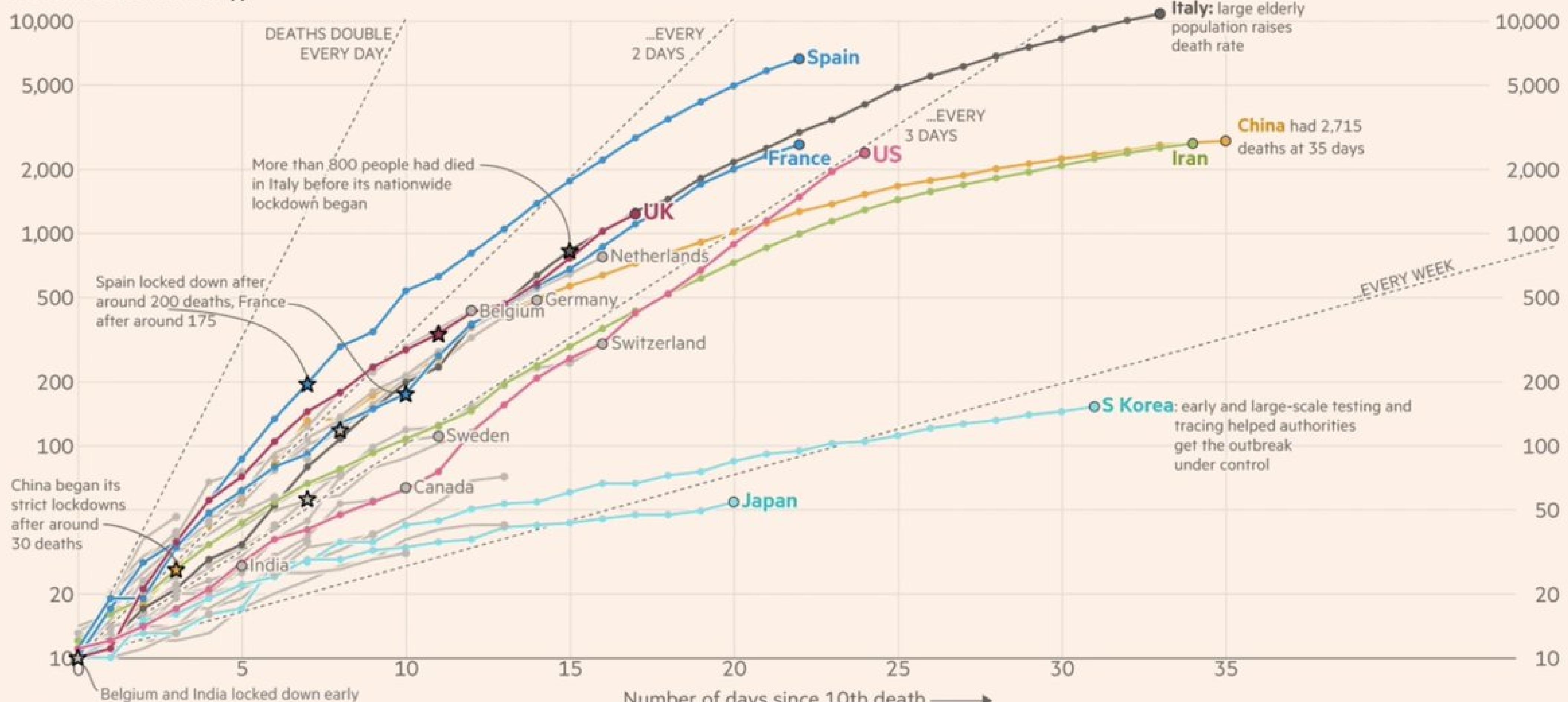
COVID Trajectories by John Burn-Murdoch (Financial Times)

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Coronavirus deaths in Italy, Spain and the US are increasing more rapidly than they did in China

Cumulative number of deaths, by number of days since 10th death

Nationwide lockdowns: ★



FT graphic: John Burn-Murdoch / @jburnmurdoch

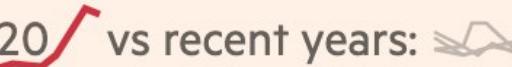
Source: FT analysis of Johns Hopkins University, CSSE; Worldometers; FT research. Data updated March 29, 19:00 GMT

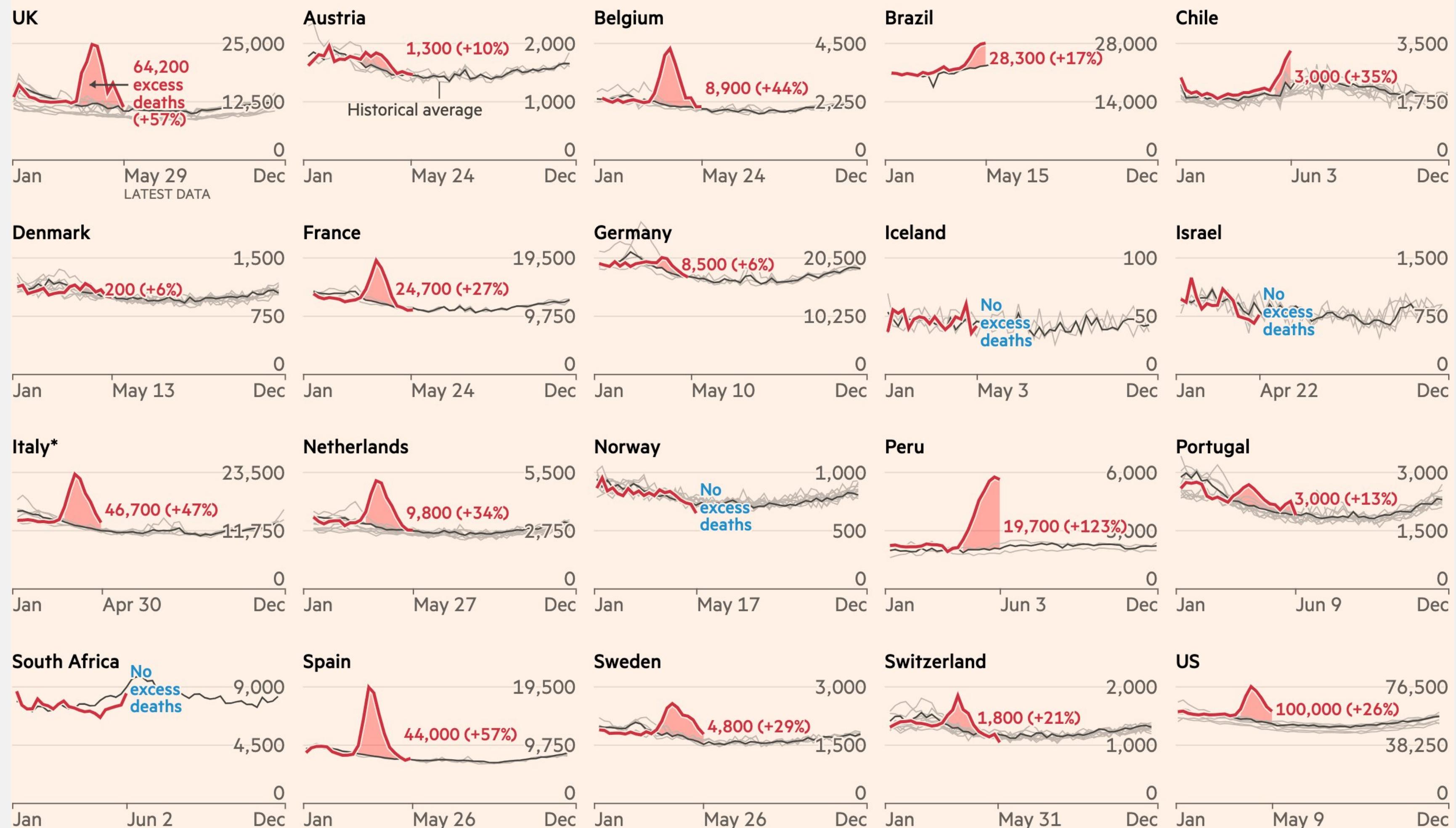
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COVID Trajectories by John Burn-Murdoch (Financial Times)

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Death rates have climbed far above historical averages in many countries that have faced Covid-19 outbreaks

Number of deaths per week from all causes, 2020 vs recent years:  Shading indicates total excess deaths during outbreak



*Italian figures may not exactly match the source data as they were scraped from a PDF

Source: FT analysis of mortality data. Data updated June 10

FT graphic: John Burn-Murdoch / @jburnmurdoch

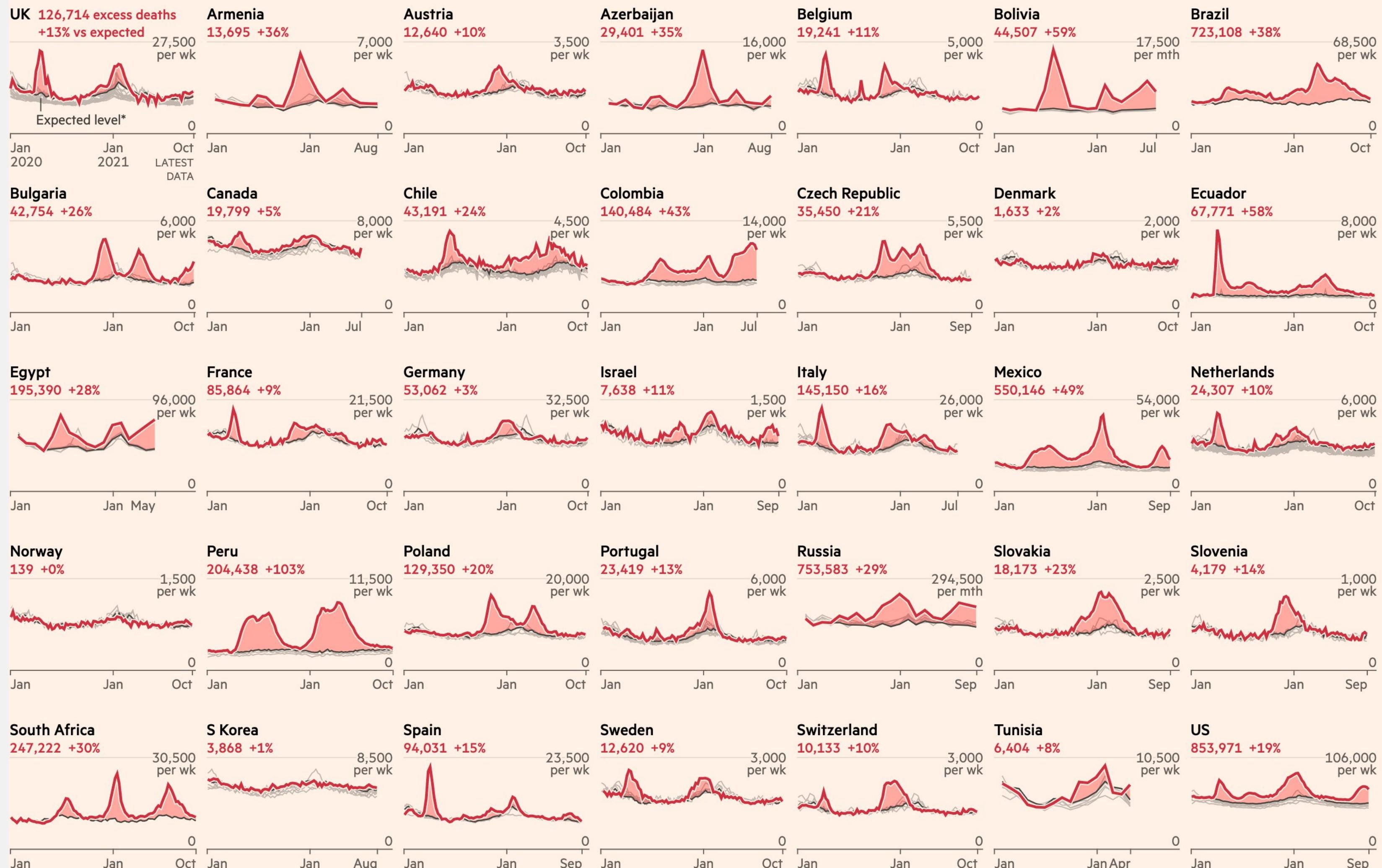
© FT

Excess Death Trajectories by John Burn-Murdoch (Financial Times)

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Death rates have climbed far above historical averages in many countries that have faced Covid-19 outbreaks

Number of deaths per week from all causes, 2020 vs recent years:  Shading indicates total excess deaths since 100 confirmed cases in the country



*Adjusted for trend over recent years

Sources: FT analysis of national mortality data and Karlinsky & Kobak's World Mortality Dataset. Data updated November 2

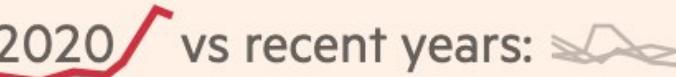
FT graphic: John Burn-Murdoch / @burnmurdoch

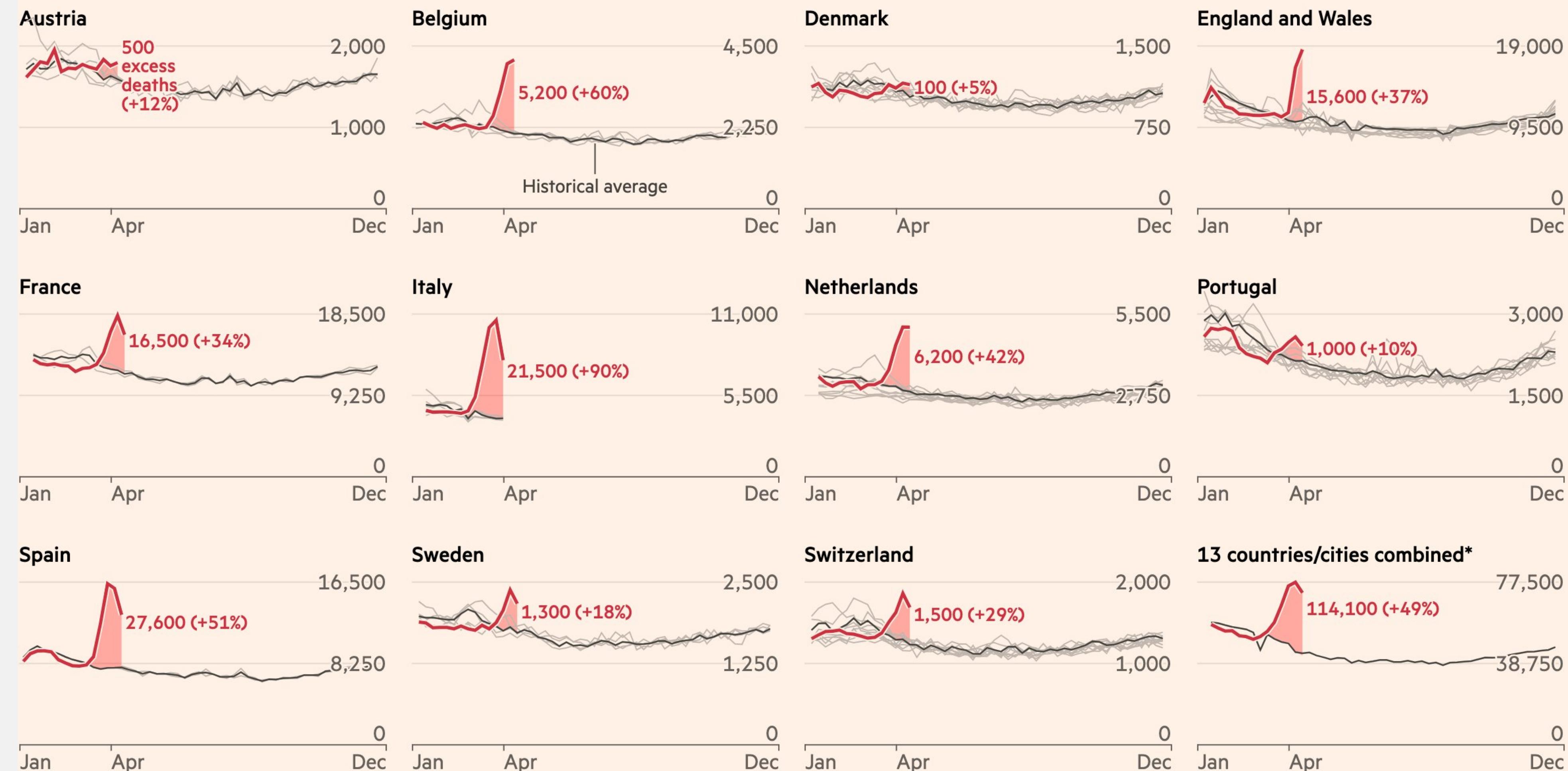
© FT

Excess Death Trajectories by John Burn-Murdoch (Financial Times)

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Death rates have climbed far above historical averages in many countries that have faced Covid-19 outbreaks

Number of deaths per week from all causes, 2020  vs recent years: 



Source: FT analysis of mortality data (Italian figures are for a subset of the country). Data updated April 26

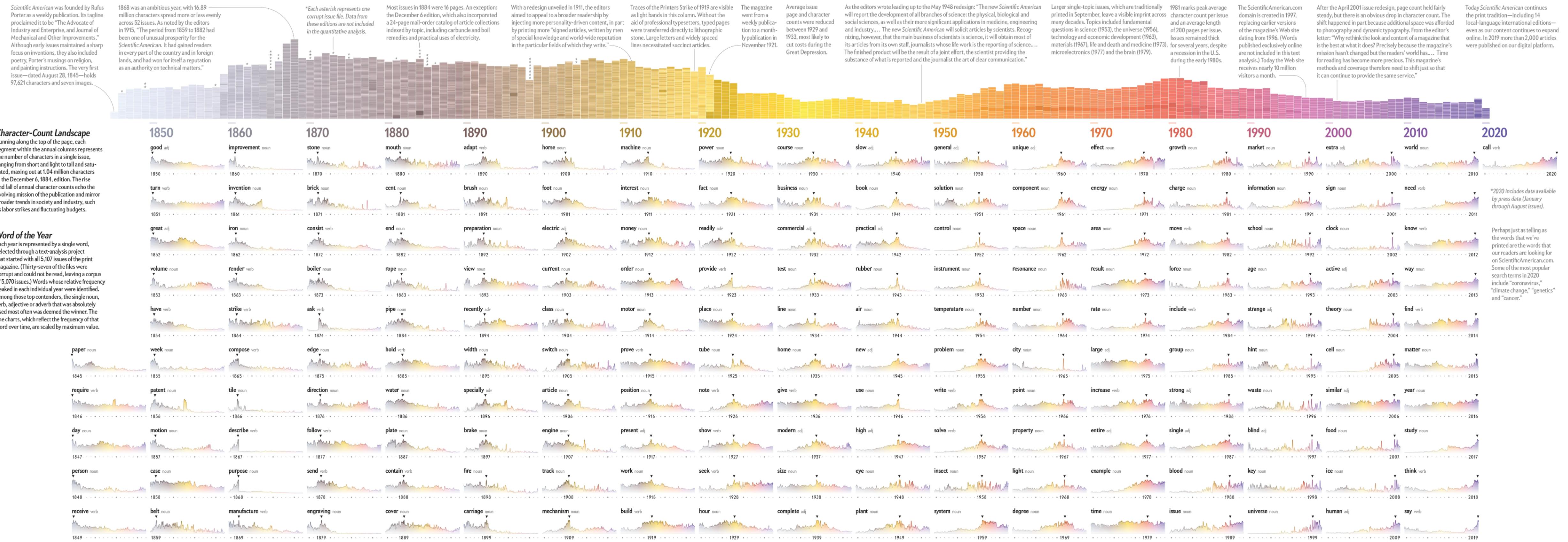
*Combined locations figure is only for weeks where all locations have reported mortality statistics

FT graphic: John Burn-Murdoch / @jburnmurdoch

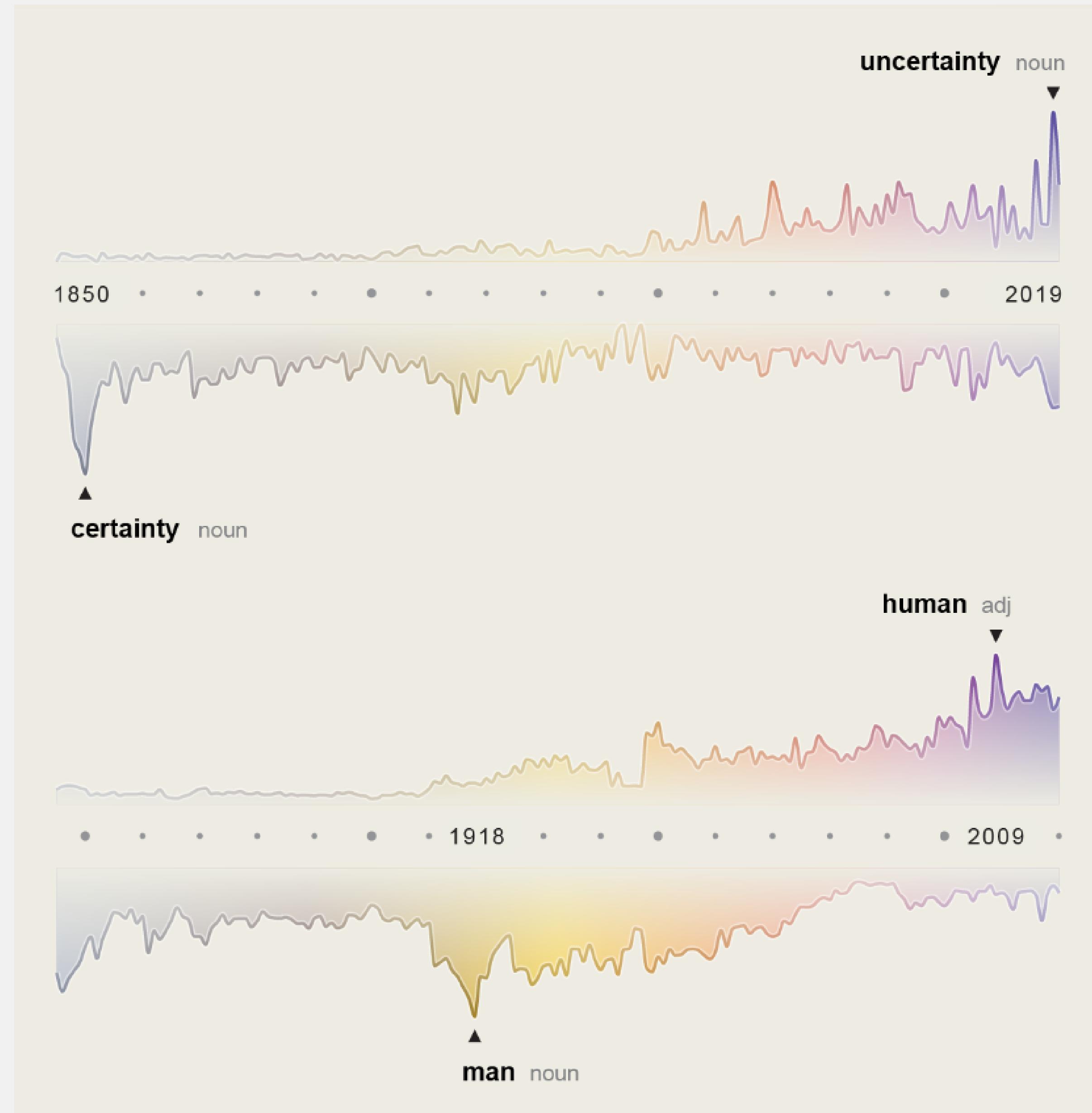
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Excess Death Trajectories by John Burn-Murdoch (Financial Times)

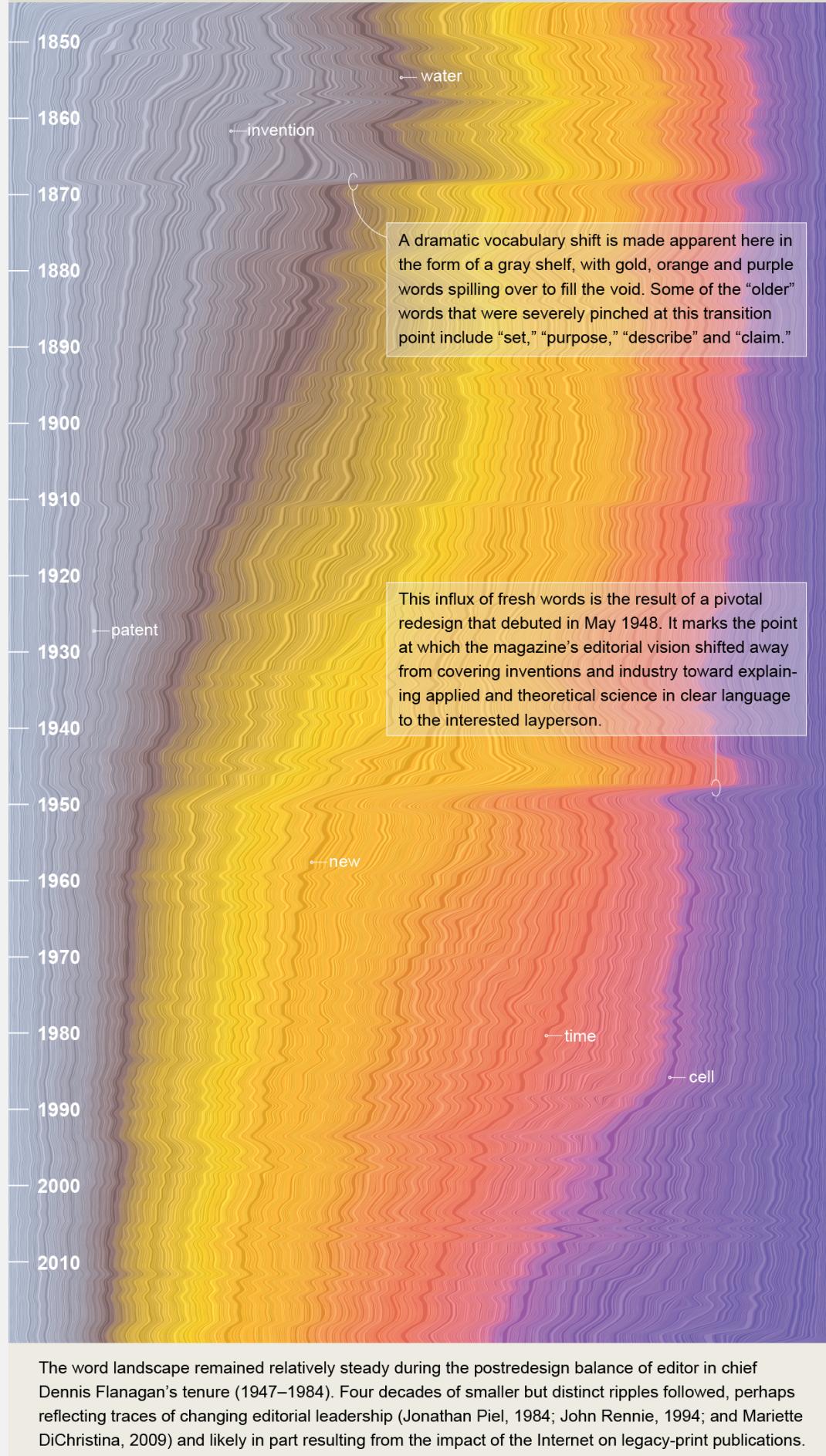
Cédric Scherer // rstudio::conf // July 2022



***"The Language of Science"* by Moritz Stefaner, Lorraine Daston, Jen Christiansen**



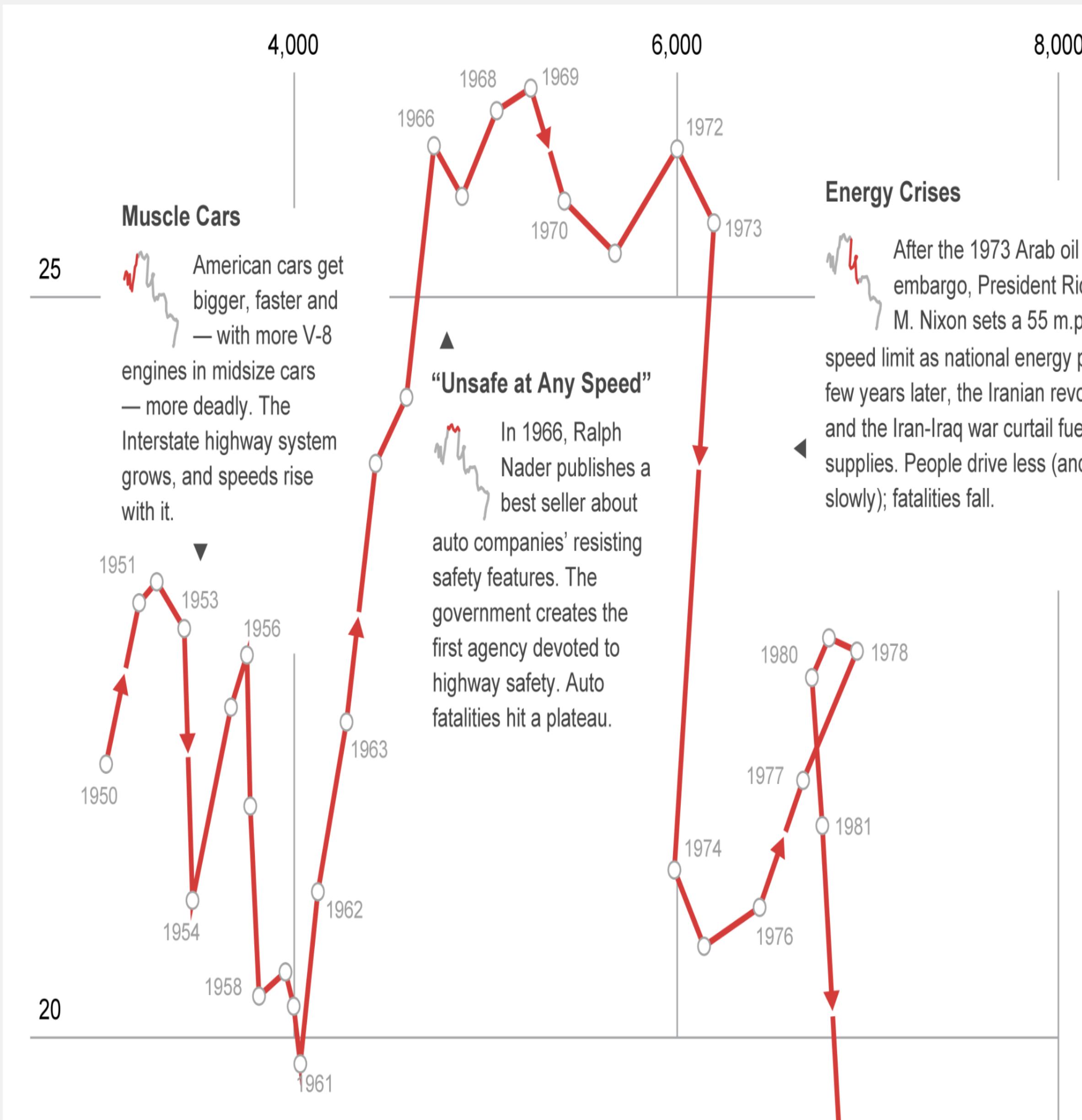
The most popular words used in the pages of *Scientific American* are displayed here by frequency, from 1845 (top) through 2020 (bottom). Before visualizing the full corpus of our archives, we culled words shorter than three letters, numbers and so-called stop words such as "then" and "or." The remaining top 1,000 words were gathered for each of the 175 years and merged across the years for a total of 4,420 prevailing words. Each layer represents one word, and the thickness of the layer corresponds to the fraction of text occupied by that word, by year. The color and horizontal position of each layer are based on the year in which the respective word's relative frequency peaked: Words routinely used in the early days of the magazine (gray) slowly give way to words used more often in recent years (purple). (The range of brightness of neighboring layers alternates for improved legibility.) The jarring visual effect of those horizontal stripes signals sudden changes in vocabulary. The three annotation bubbles here offer some historical context for both rapid shifts and consistent periods. —J.C.



"The Language of Science" by Moritz Stefaner, Lorraine Daston, Jen Christiansen

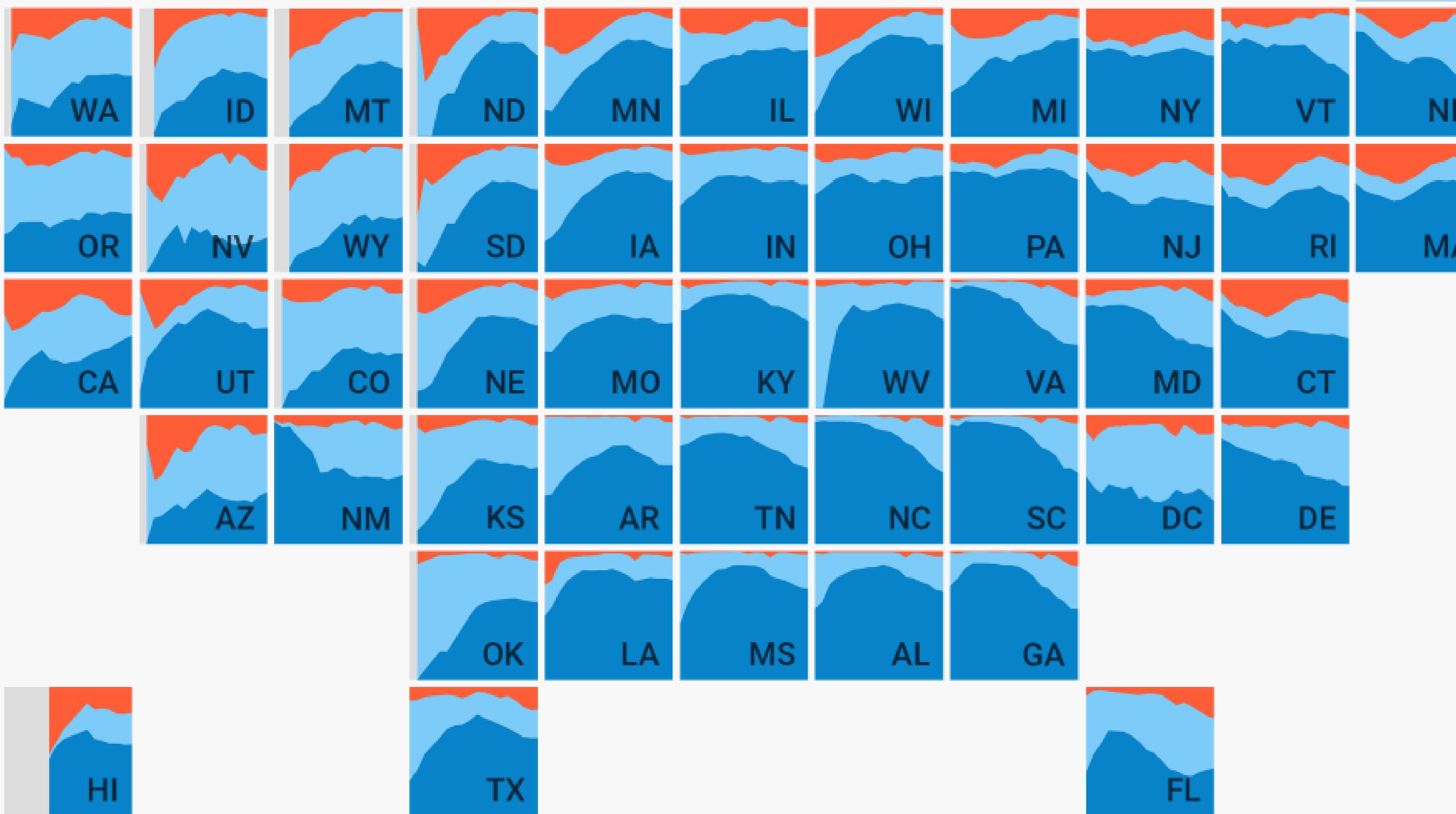
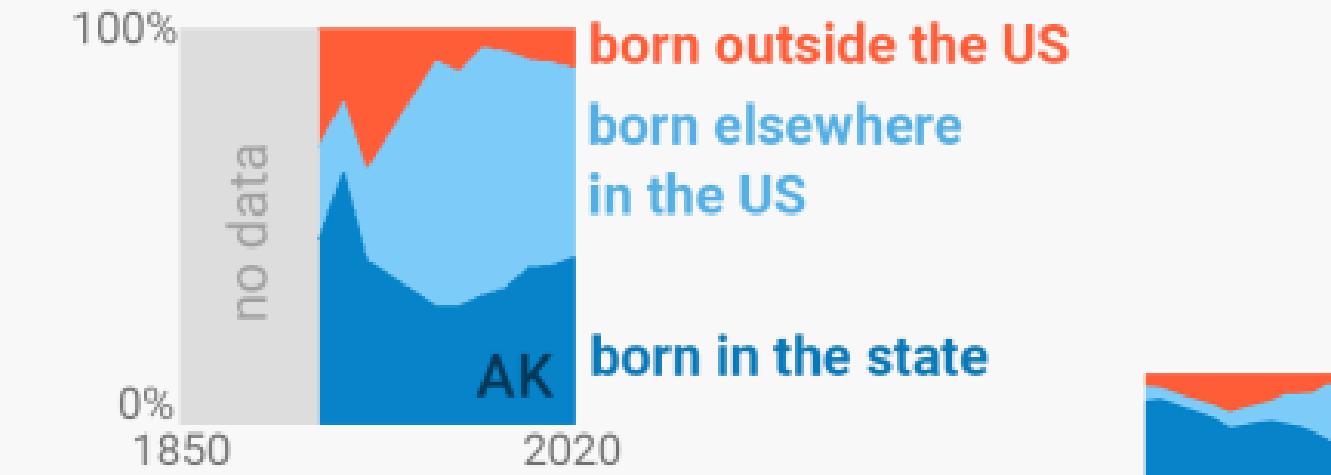


“Driving Safety, in Fits and Starts” by Hannah Fairfield (New York Times)



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Where are Americans born?

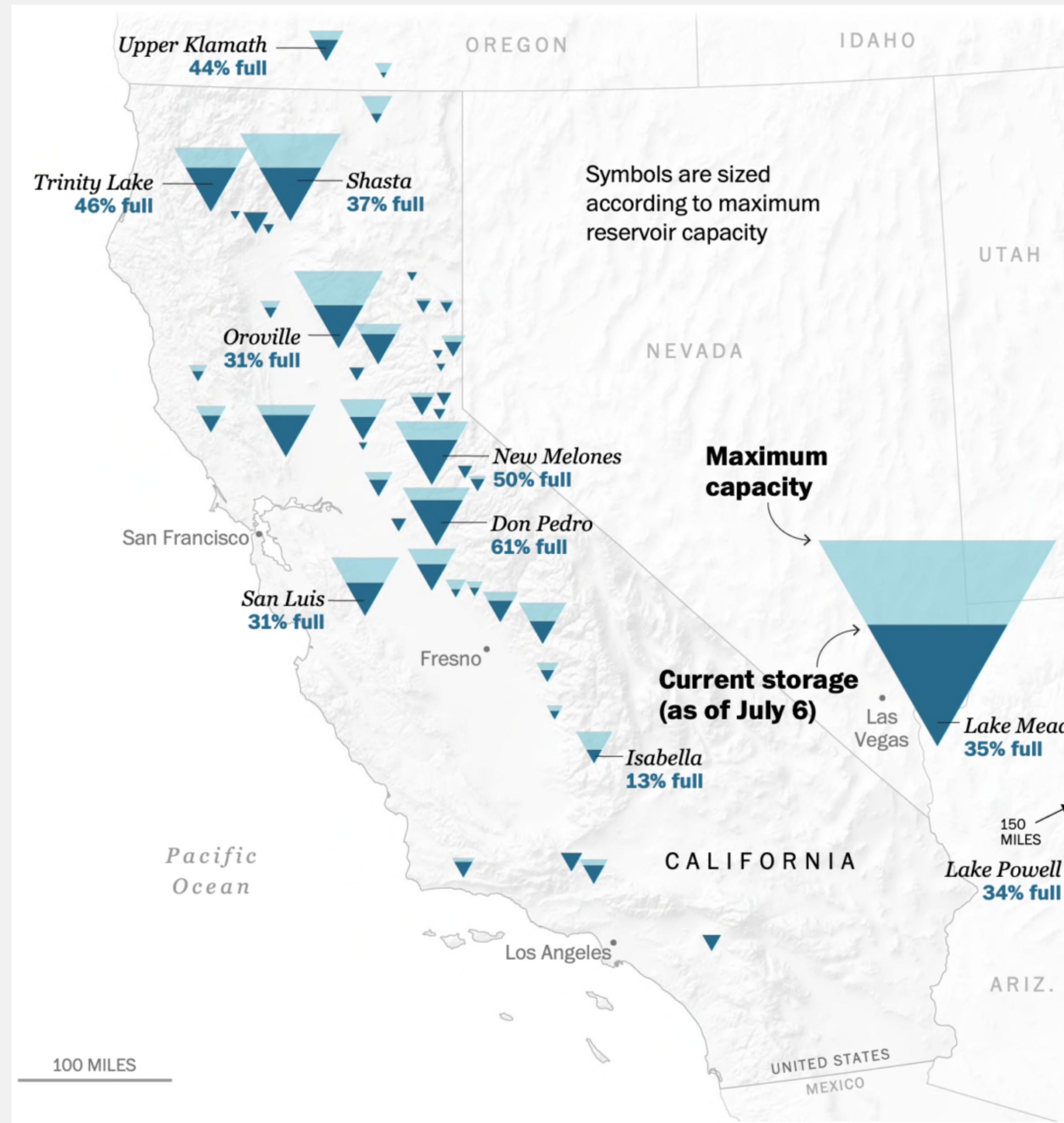


1POINT21
INTERACTIVE

source: Steven Ruggles, Sarah Flood, Sophia Foster, Ronald Goeken, Jose Pacas, Megan Schouweiler and Matthew Sobek.
IPUMS USA: Version 11.0 [dataset]. Minneapolis, MN: IPUMS, 2021. <https://doi.org/10.18128/D010.V11.0>

“Where are Americans born?” by @ErinDataViz

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“Reservoirs are drying up as consequences of the Western drought worsen” by Zach Levitt (Washington Post)