

Welcome to the

2024 CAC Florida Climate Conference

Climate and Human Health

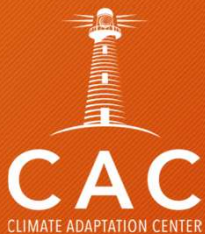


The Economics of Hurricanes vs. Pandemics

David R. Kotok

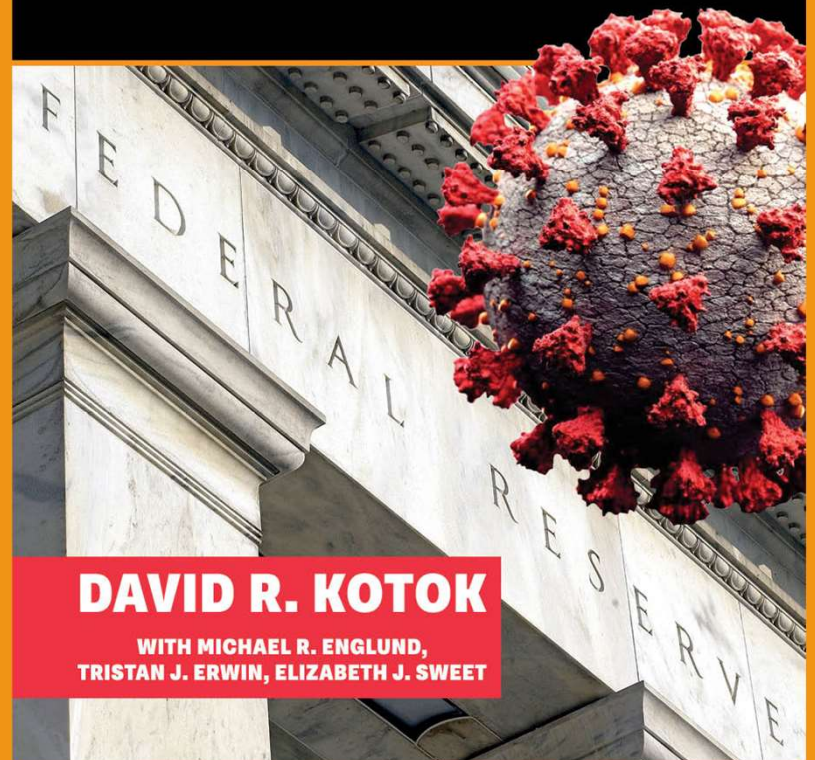


David R. Kotok



THE FED AND THE FLU

**PARSING PANDEMIC
ECONOMIC SHOCKS**



DAVID R. KOTOK

WITH MICHAEL R. ENGLUND,
TRISTAN J. ERWIN, ELIZABETH J. SWEET

A Century of Learning

What did the Fed do?

- 1918 H1N1 flu
- 1957 H2N2 flu
- COVID-19



“Longer-Run Economic Consequences of Pandemics” Jordá, Singh, and Taylor

“Significant macroeconomic after-effects of pandemics persist for decades, with real rates of return substantially depressed, in stark contrast to what happens after wars.”

(Oscar Jordá, Sanjay R. Singh, and Alan M. Taylor. 2020. "Longer-Run Economic Consequences of Pandemics," Federal Reserve Bank of San Francisco Working Paper 2020-09. Available at <https://doi.org/10.24148/wp2020-09>.)



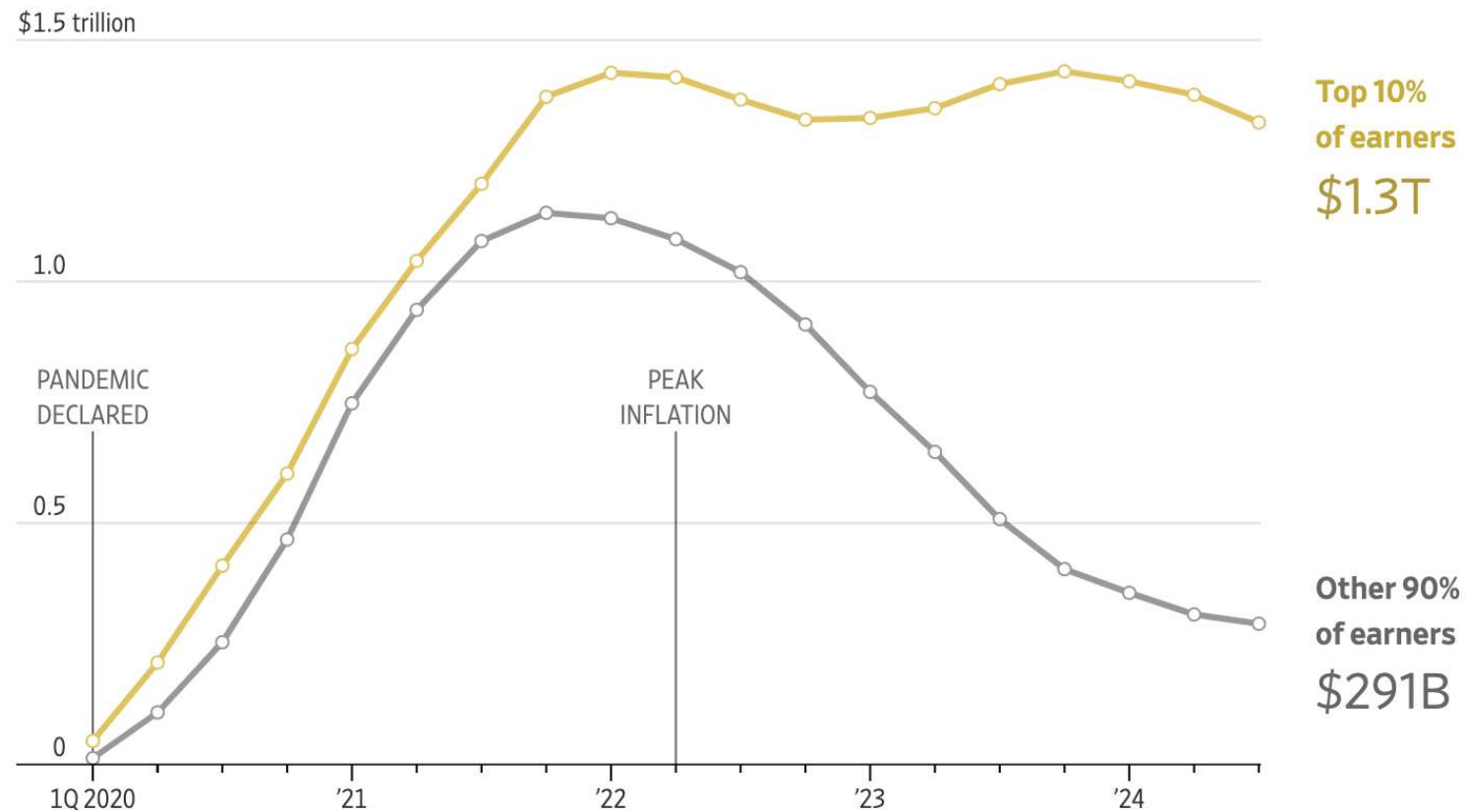
Wars & Natural Disasters vs. Pandemics

Wars and natural disasters have comparable effects:

- People die.
- Physical capital is destroyed.
- Destruction is followed by rebuilding, spurring economic activity.

In pandemics, people die but capital remains.

Cumulative Excess Savings by Income 2020-2024



Note: Chart shows savings above the typical prepandemic saving rate.
Source: Moody's Analytics

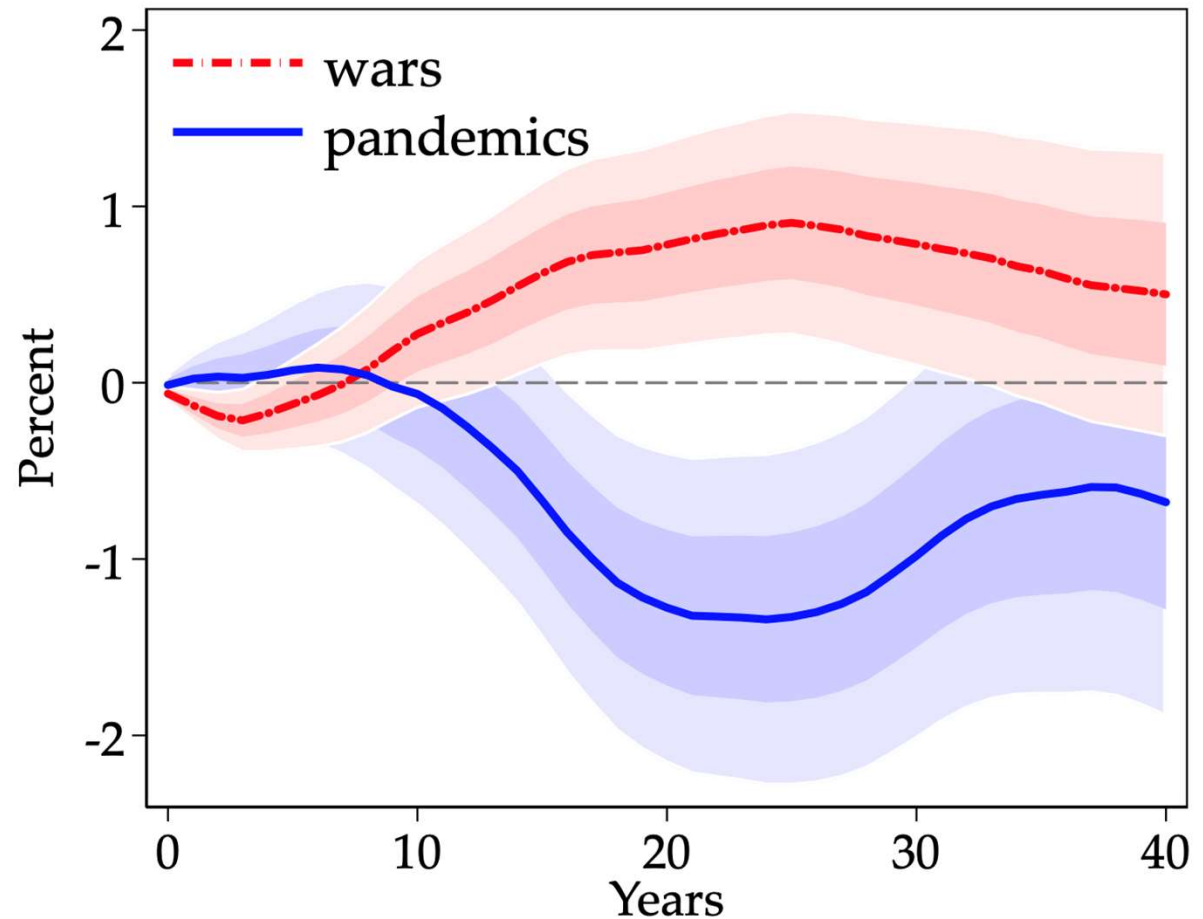
Pandemics vs. Wars:

Real Natural Rate of Interest

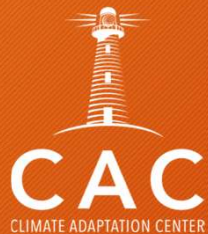


(Jorda, Oscar, Sanjay R. Singh, and Alan M. Taylor. 2020. "Longer-Run Economic Consequences of Pandemics," Federal Reserve Bank of San Francisco Working Paper 2020-09. Available at <https://doi.org/10.24148/wp2020-09>.)

(a) Response of European real natural rate

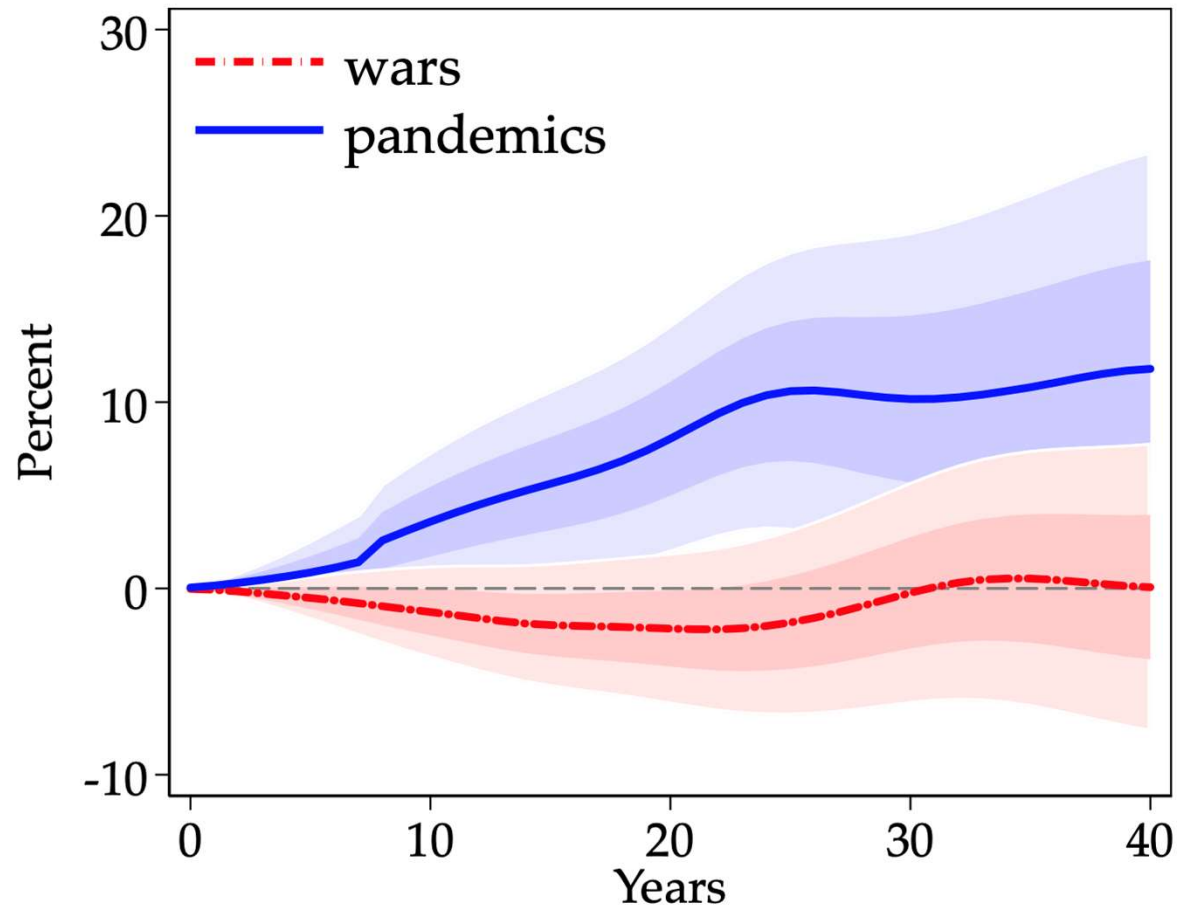


Pandemics vs. Wars: Real Wages



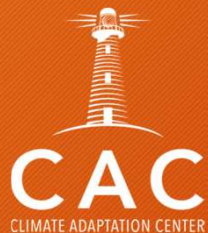
(Jorda, Oscar, Sanjay R. Singh, and Alan M. Taylor. 2020. "Longer-Run Economic Consequences of Pandemics," Federal Reserve Bank of San Francisco Working Paper 2020-09. Available at <https://doi.org/10.24148/wp2020-09>.)

(b) *Response of real wages in Great Britain*



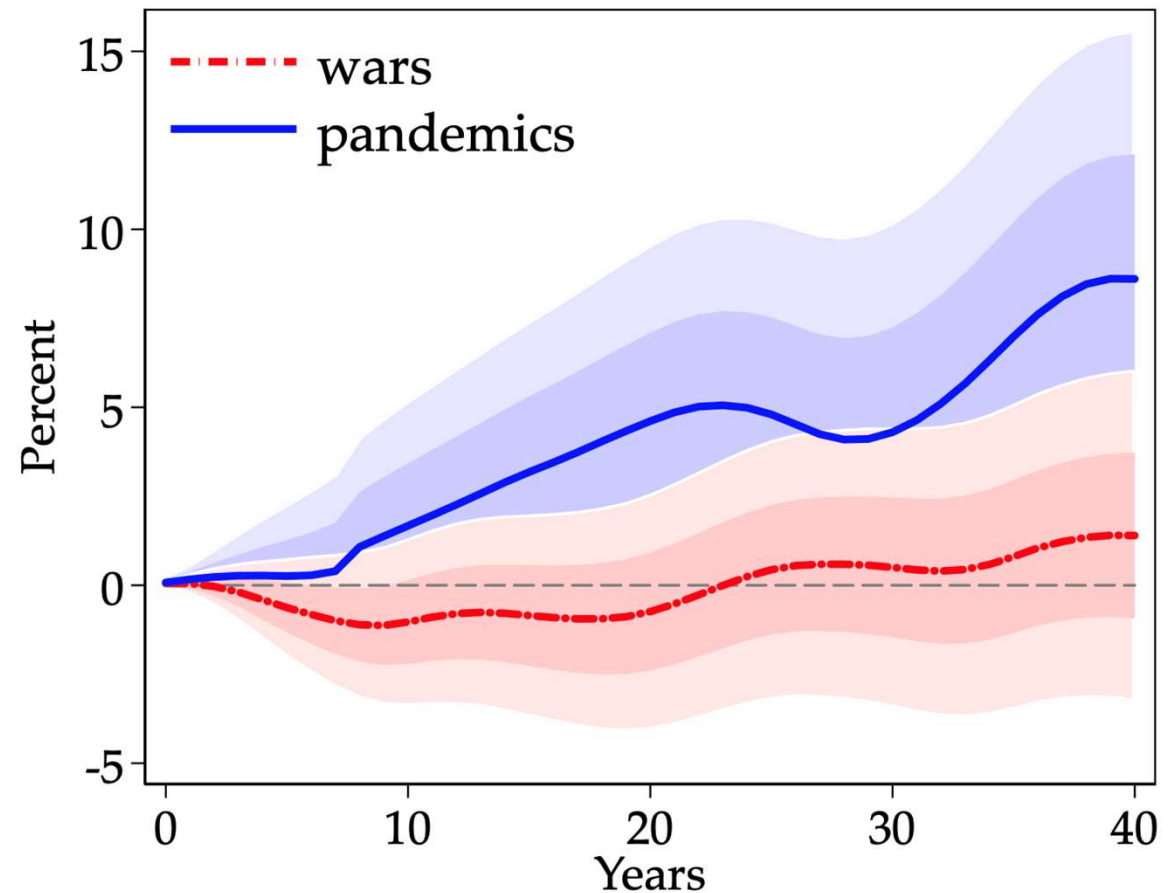
Pandemics vs. Wars:

Real GDP per Capita



(Jorda, Oscar, Sanjay R. Singh, and Alan M. Taylor. 2020. "Longer-Run Economic Consequences of Pandemics," Federal Reserve Bank of San Francisco Working Paper 2020-09. Available at <https://doi.org/10.24148/wp2020-09>.)

(c) *Response of real GDP per capita in England*



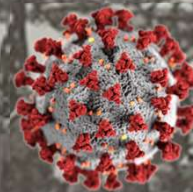
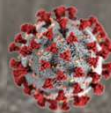
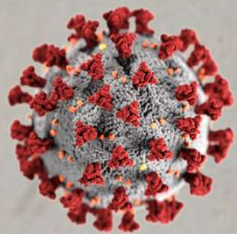
What the Past Says about the Future

History repeats and
repeats and repeats.

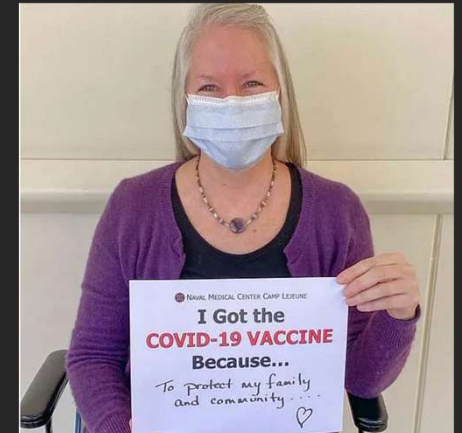


It's Always Pathogen x People

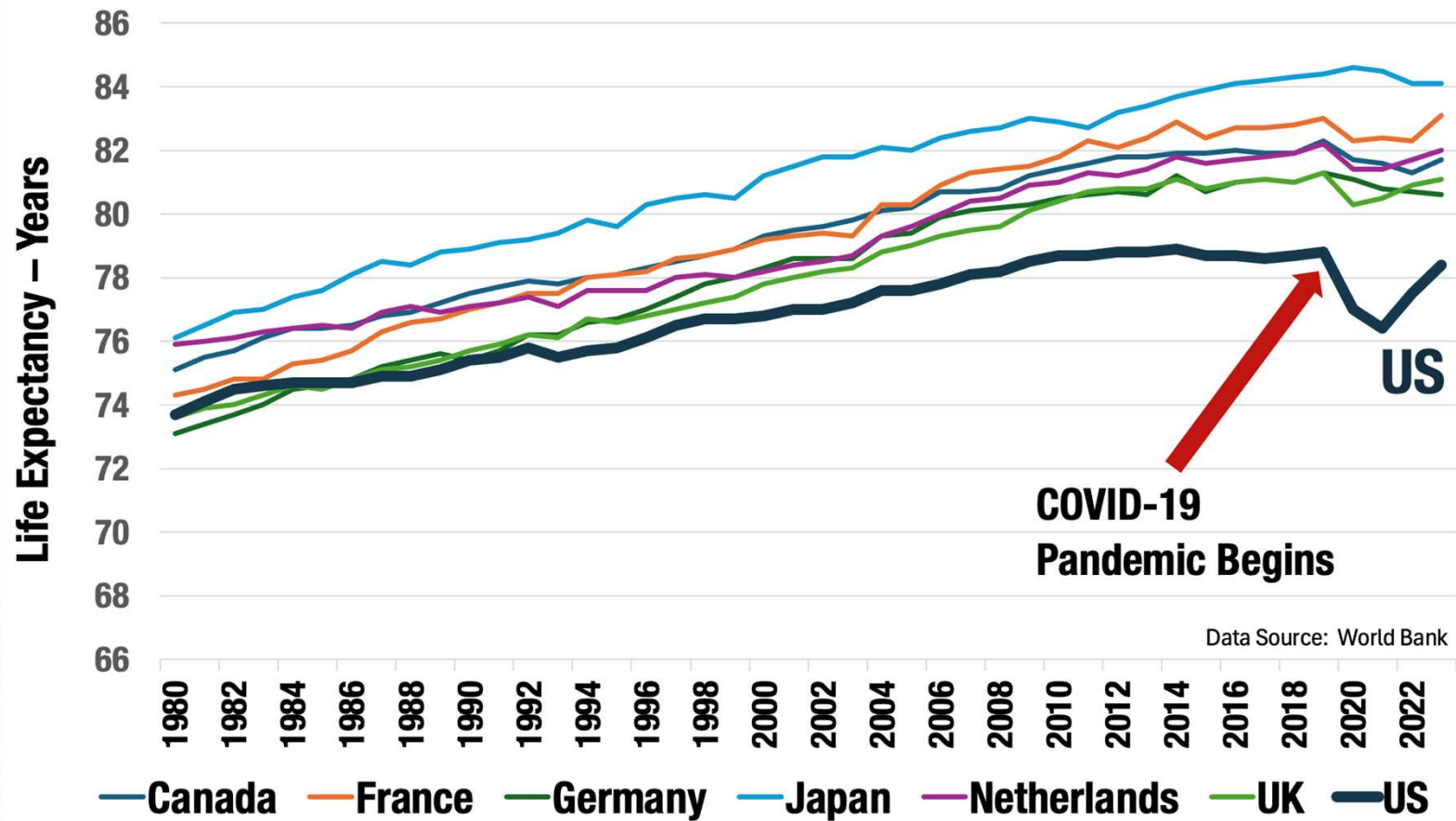
Behavior changes
outcomes —
pathogens don't care.



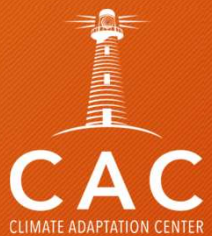
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Life Expectancy by Country 1980–2023



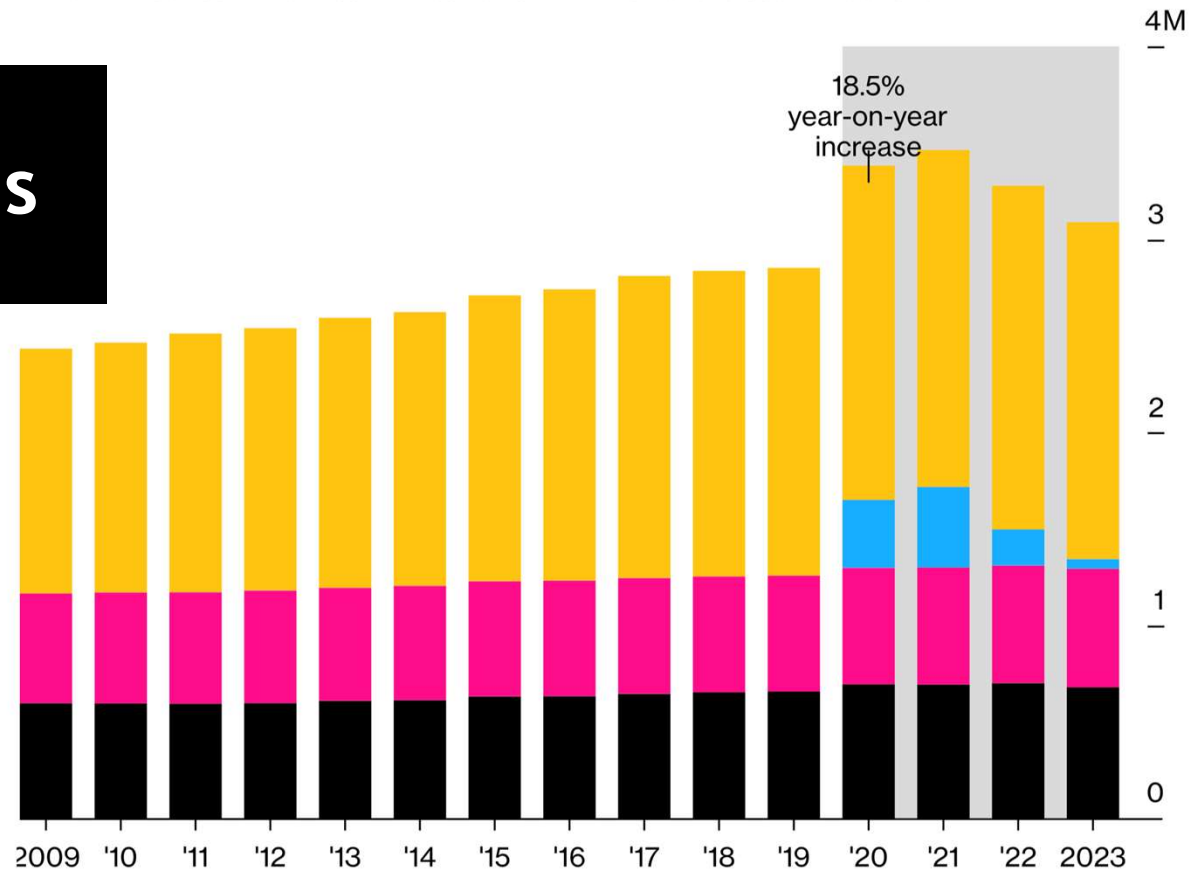
Surge in Excess Deaths



The Covid Pandemic Fueled a 4-Year Mortality Surge in the US

Annual crude deaths by underlying cause since 2009

■ Heart Disease ■ Cancer ■ Covid-19 ■ All other causes ■ Covid era



Source: National Vital Statistics System. CDC WONDER Online Database, chart by Bloomberg
Note: 2023 data are provisional

Calculating COVID's Demographic Shock

Excess Deaths

DALYs (Disability-adjusted life years)



QALYs (Quality-adjusted life years)



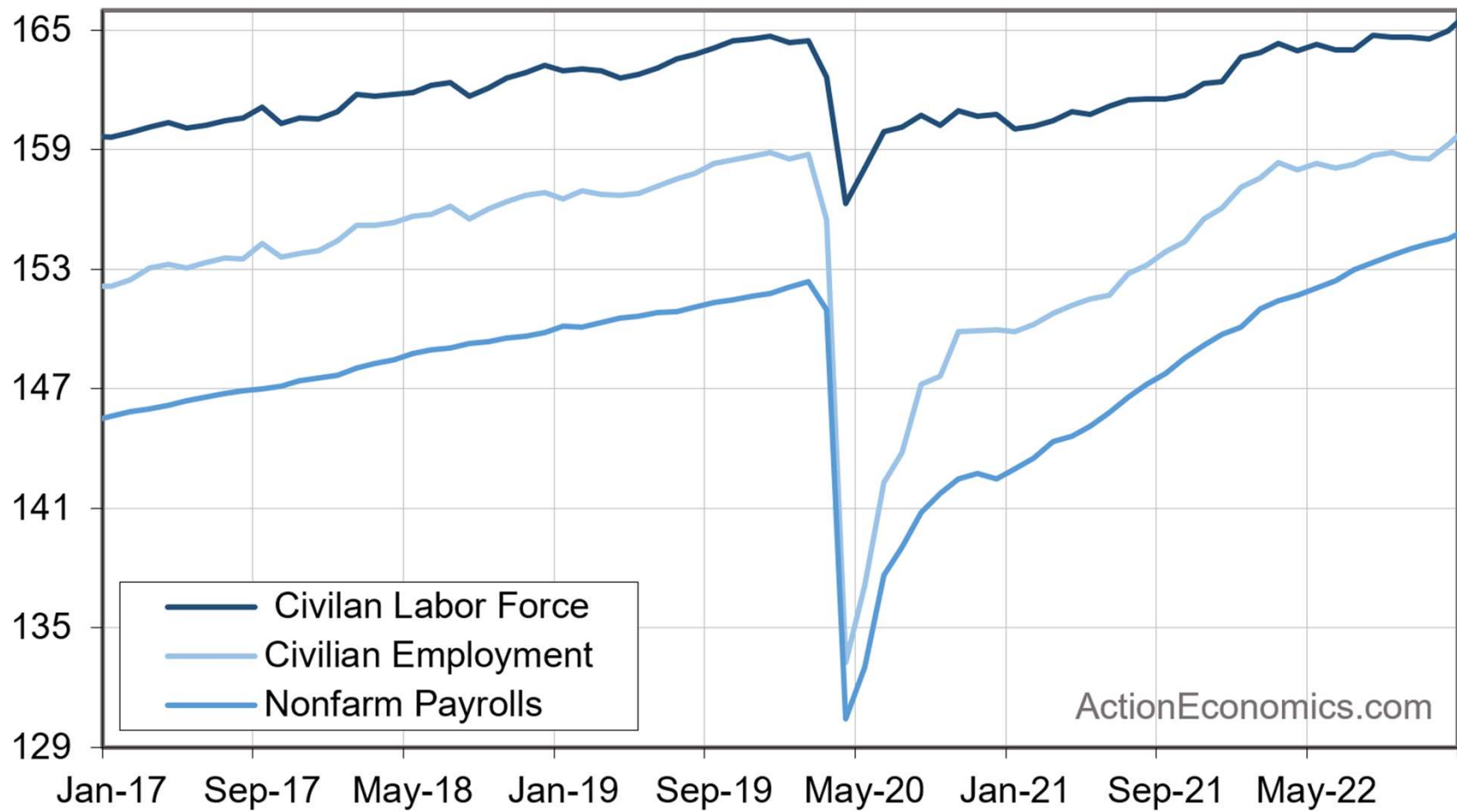
Total Pandemic Demographic Shock

The Fed's COVID Response

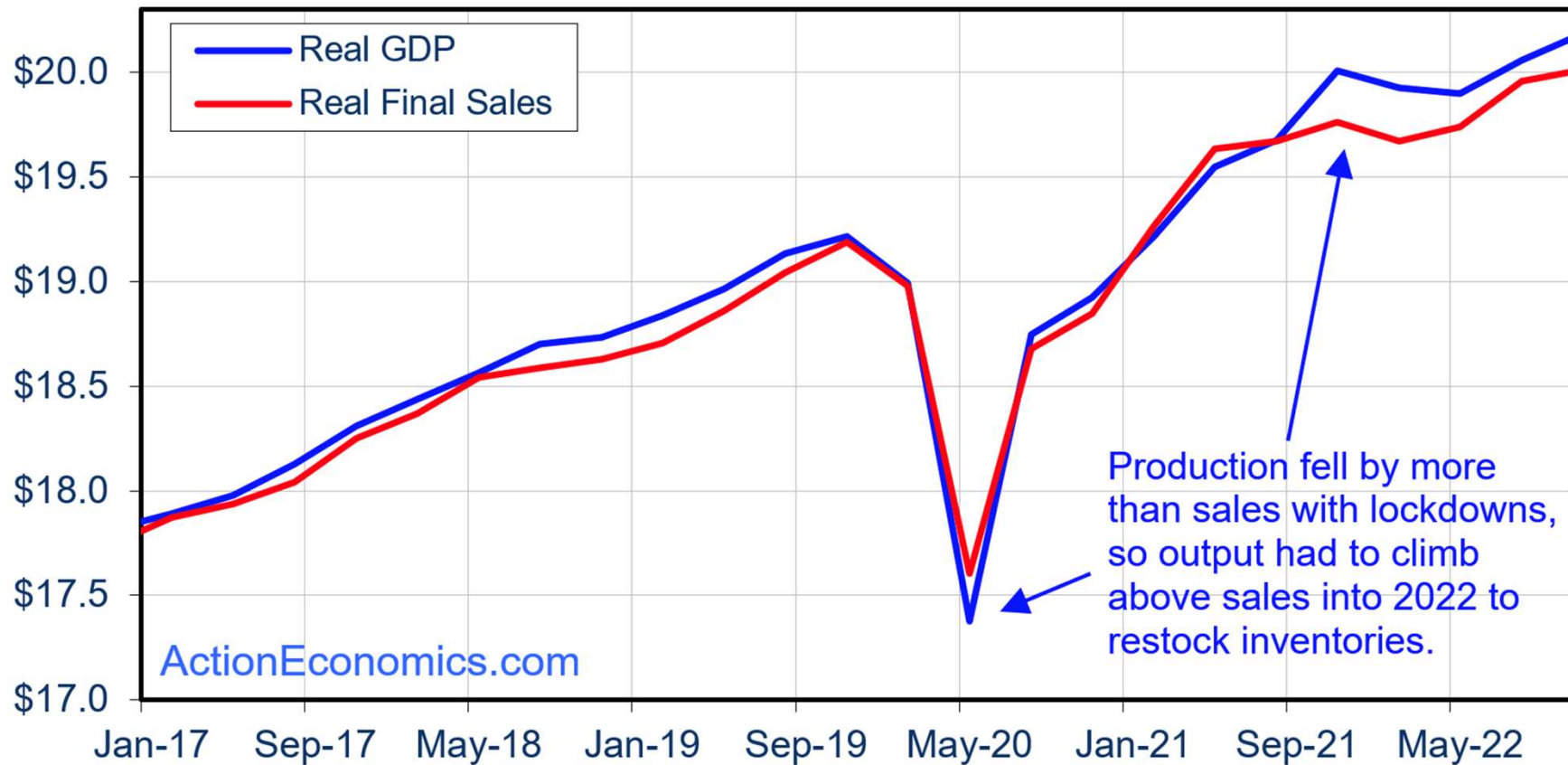


The Fed's response to COVID prevented a Great Depression.

Household Labor Force & Emp. vs Nonfarm Payrolls

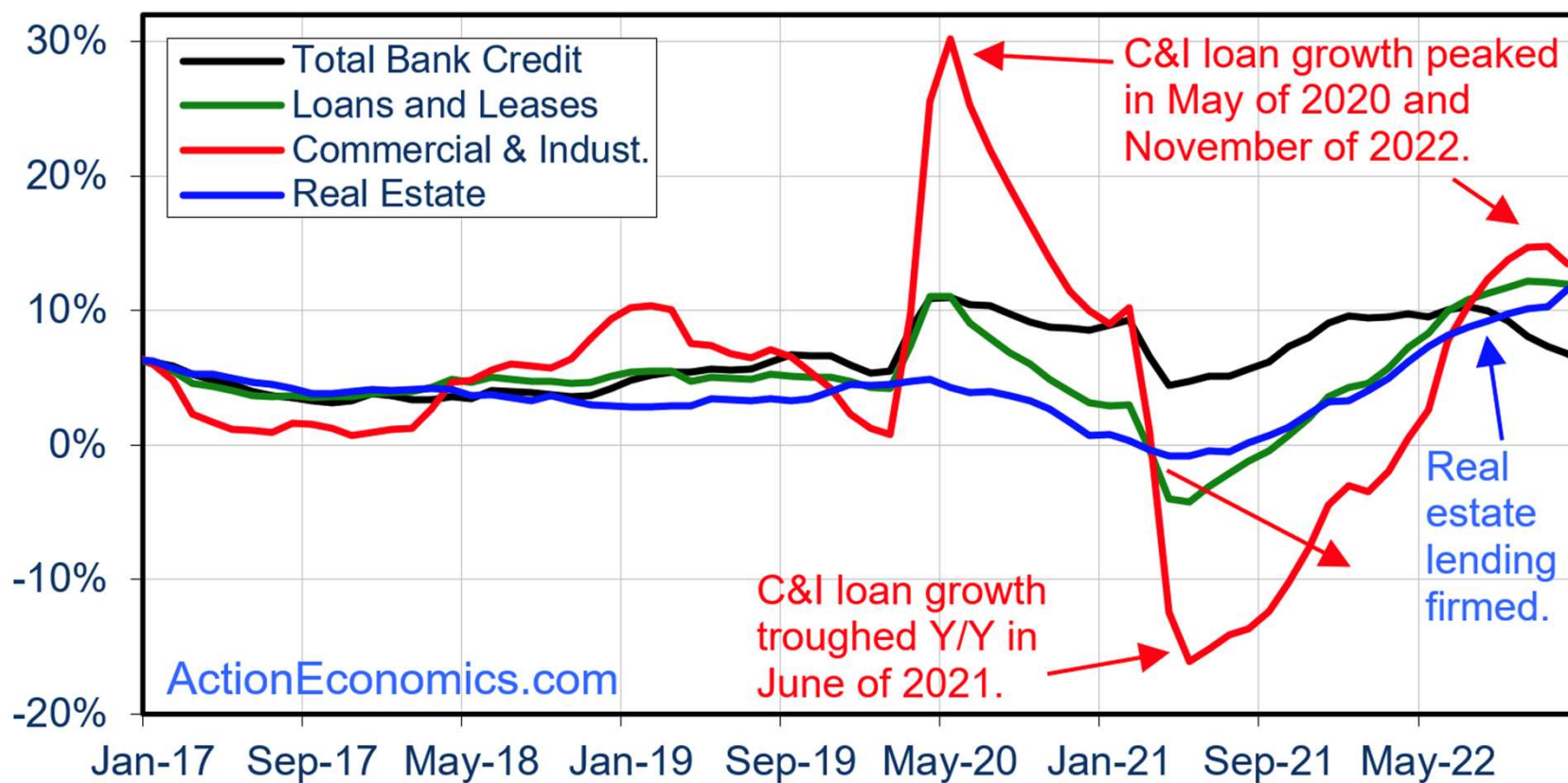


Real GDP & Final Sales vs Pre-2008 Trend, \$Tlns



ActionEconomics.com

Total Y/Y Bank Credit and Component Growth



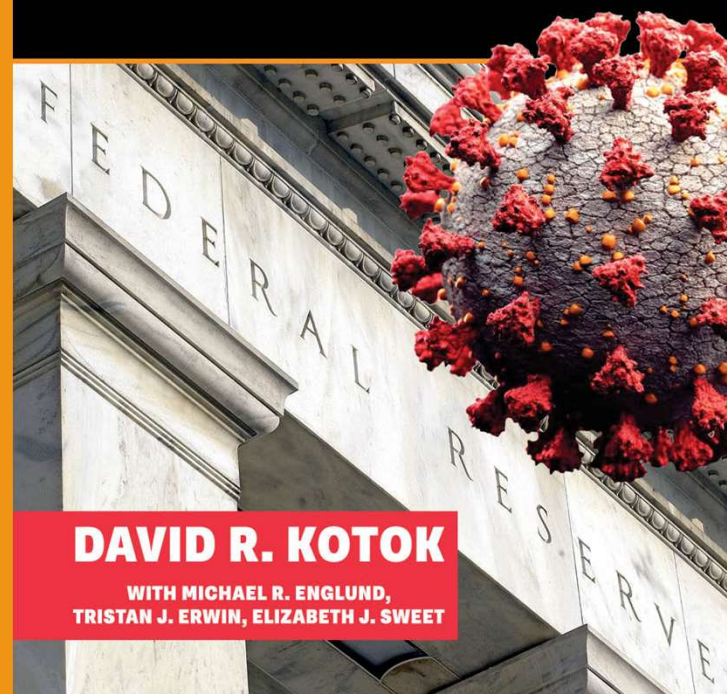
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