

THOUGHTS ON OPENING UP AND INEQUALITIES

Angus Deaton, Brookings, May 12, 2020

Pandemics and inequalities

2

- “Medical statistics will be our standard of measurement: we will weigh life for life and see where the dead lie thicker, among the workers or among the privileged” Rudolf Virchow, 1848
- “inequalities have powerfully sculpted not only the distribution of infectious diseases but also the course of health outcomes among the afflicted” Paul Farmer, 2001
- “Four different kinds of violent ruptures have flattened inequality: mass mobilization warfare, transformative revolution, state failure, and lethal pandemics.” Walter Scheidel, 2017
- “A situation like this, it highlights problems that already exist in society that people haven’t noticed. Suddenly you see things. It is like an x-ray machine.” Anderson Cooper, 2020

Warning

3

- Calculations below are subject to revision
- Numbers are changing
- I may have made mistakes!

Rise, fall, SIR and re-opening

4

- The SIR model—which does work!—predicts a rise and fall in numbers of deaths
- IHME curve-fitting claimed to show that the fall would be complete with zero deaths by May 1, and 60,000 in total
 - ▣ Now August 4th, with 137,184 deaths, but same shape
 - ▣ Curve fitting plus parallels with Italy, Iran, and other countries
- Re-opening problem is wait until deaths are low enough
 - ▣ So that it is safe to come out
 - ▣ New York has a shape like this
- Economists calculated VSL and recommended that social distancing would save enough lives to be hugely worth while

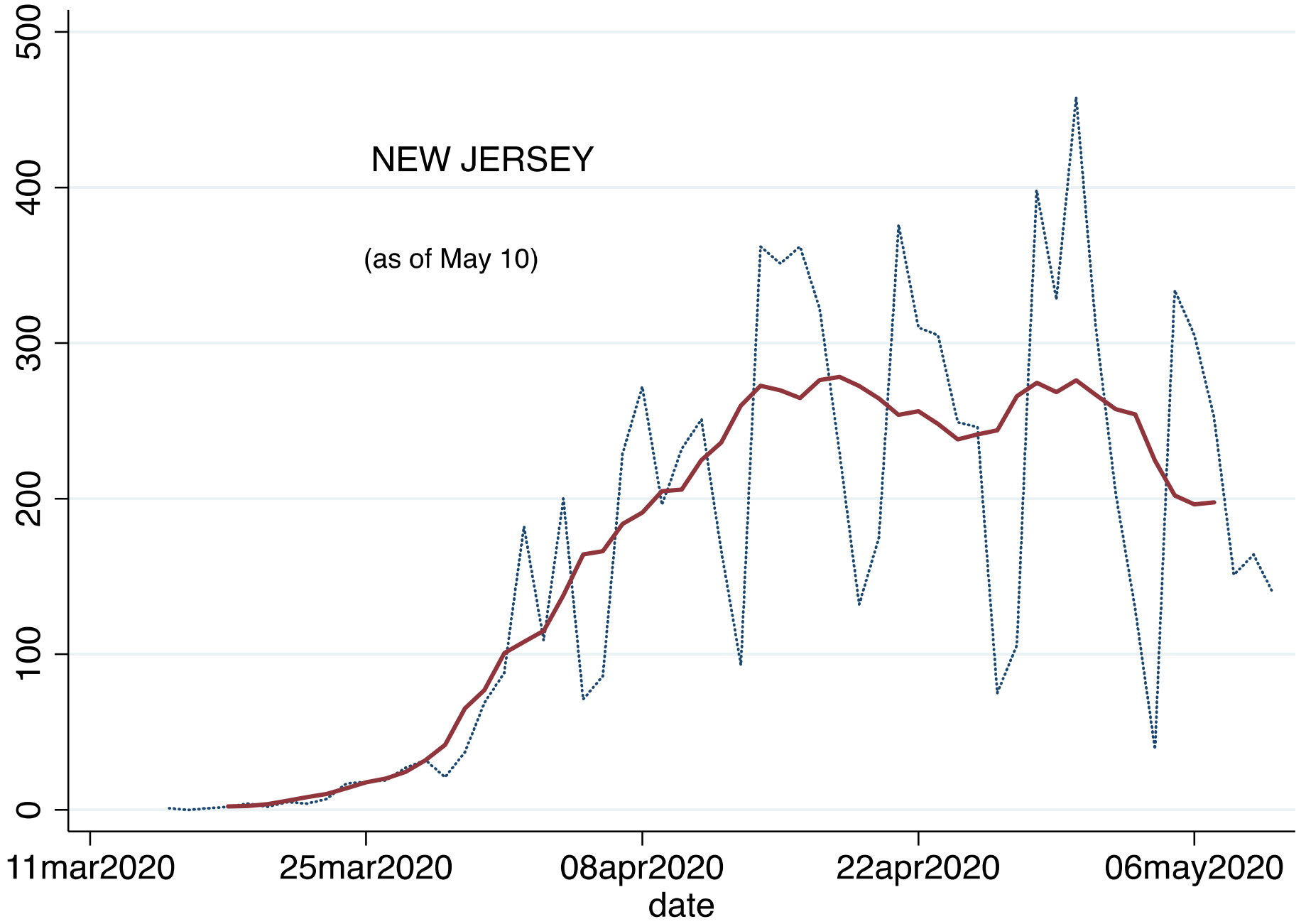
All of this is problematic

5

- Without a vaccine, could be around a million COVID deaths
 - ▣ Assuming immunity exists, so herd immunity is possible
- To get there, a series of smaller local epidemics or waves
 - ▣ Each may conform to SIR, but not for the US as a whole
- Social distancing saves lives by relieving pressure on healthcare
 - ▣ Which saves some COVID and other patients, but does not stop number being infected
- Successful distancing **prolongs** the epidemic in the absence of vaccine
 - ▣ Saving lives temporarily is a good thing, but different calculation
 - ▣ Even for the elderly, including Swedish elderly
 - ▣ May make time for a vaccine, or a medicine, e.g. antiviral cocktail
- Safe to come out is intolerably far ahead: several years
 - ▣ So we need smart opening up now, which is happening
 - ▣ Infection proofing workplaces and leisure places where that is possible
 - ▣ Protection of vulnerable groups
 - ▣ See Jim's presentation

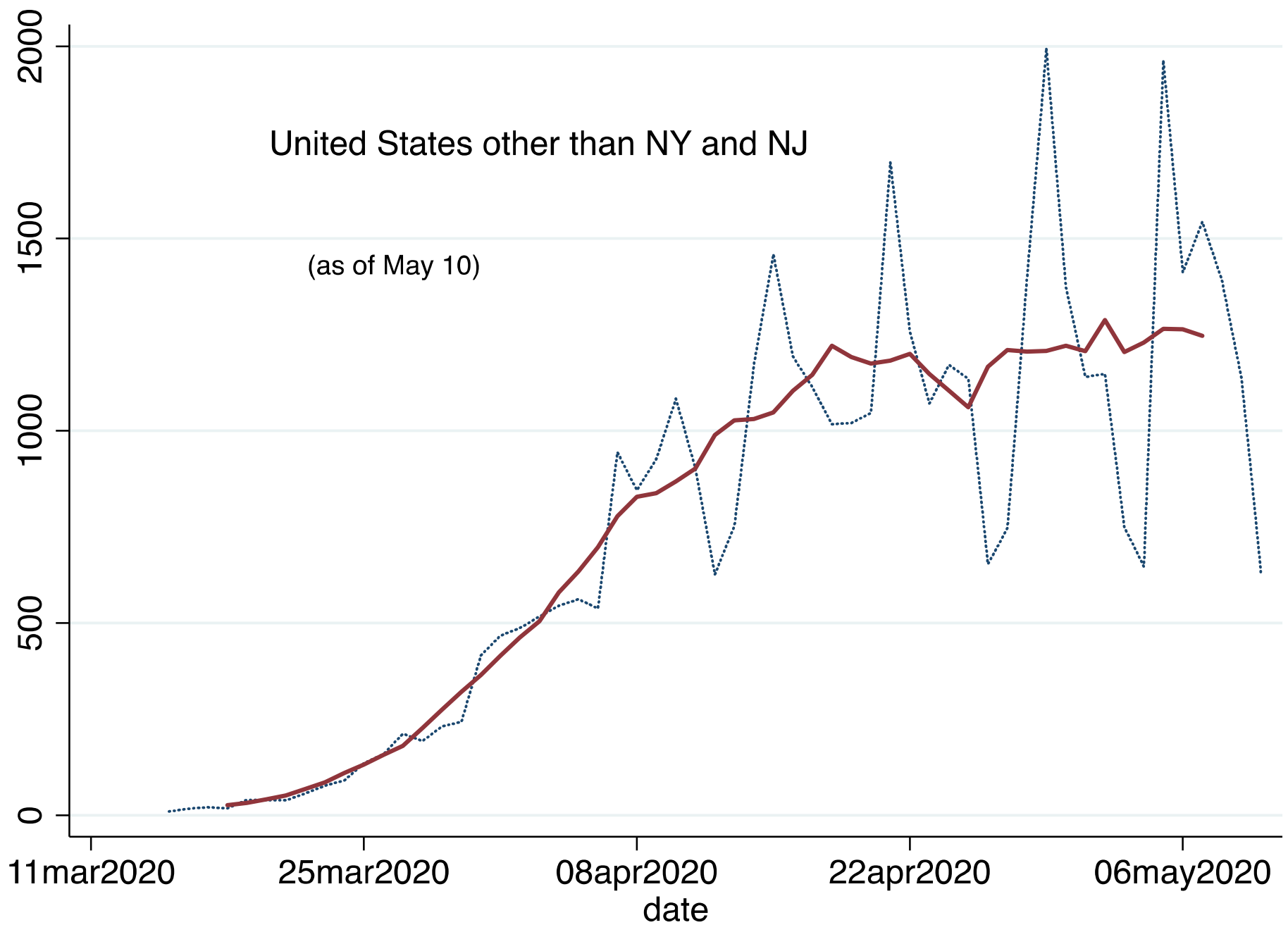
NEW JERSEY

(as of May 10)



United States other than NY and NJ

(as of May 10)



8

Inequalities

The quick and the dead

10

- Central inequality: Living v dying
- Additional risk is close to proportional to pre-existing risk
 - ▣ Might regard this as fair distribution (or not)
- If mortality doubles at all ages, life expectancy falls from 78.6 in 2017 to 70.1 (1963 level, losing 57 years of progress)
- More realistic, mortality rises by 35 percent, LE falls from 78.6 in 2017 to 75.0 (1989 level, losing 31 years of progress)
- 1918-19 pandemic reduced LE by 7 years, but increased by 8 years in 1919
 - ▣ Some estimates give larger numbers, we don't know for sure
- Perhaps a bounce-back from COVID too?

EDUCATION, LABOR MARKETS, AND COVID

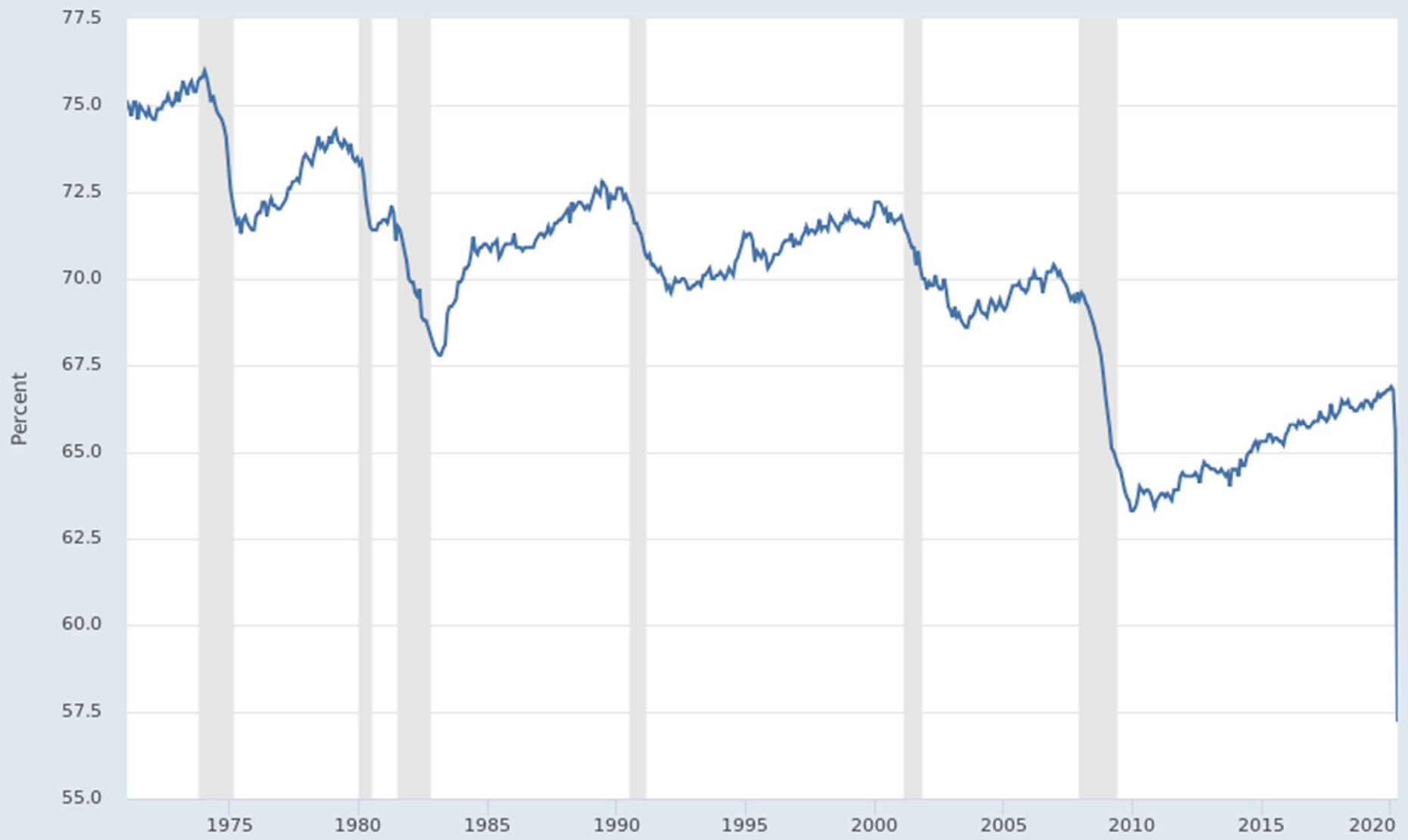
Education and death in US today

12

- Deaths of despair (suicide, overdoses, alcoholic liver disease) have risen rapidly in the US for those without a BA since 1995
 - ▣ 158,000 deaths in 2018, about 100,000 excess over “normal”
- COVID-19 likely to have second waves, but will eventually stop
- But 100,000 deaths of despair a year for as far as we can see
 - ▣ Overdoses may fall, though we don't know what COVID is doing
 - ▣ Suicides rising and likely to increase because of isolation
- These excess deaths are almost entirely among those without a four year college degree
- Accompanied by a large decline in employment population ratio and reduction in earnings

FRED

— Employment-Population Ratio - Men



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Labor Statistics

myf.red/g/qWEg

Labor markets and COVID

14

	All	BA or more
UNEMPLOYMENT		
March 2020	6.8	2.5
April 2020	21.2	8.4
EMPLOYMENT TO POPULATION RATIO		
March 2020	54.9	71.2
April 2020	45.1	65.6

Social distancing

15

- Social distancing further widens gap between those with and without a BA

- Without a BA, either essential or non-essential
 - ▣ Former risk their lives (health personnel, bus or subway workers, elderly care attendants, food retail, delivery)
 - ▣ Latter risk their livelihoods (non-food retail, services, restaurants etc.)
 - ▣ Opening up risks losing unemployment benefits if they choose not to work
 - ▣ Educated elite stay at home, go on working, stay safe and get paid

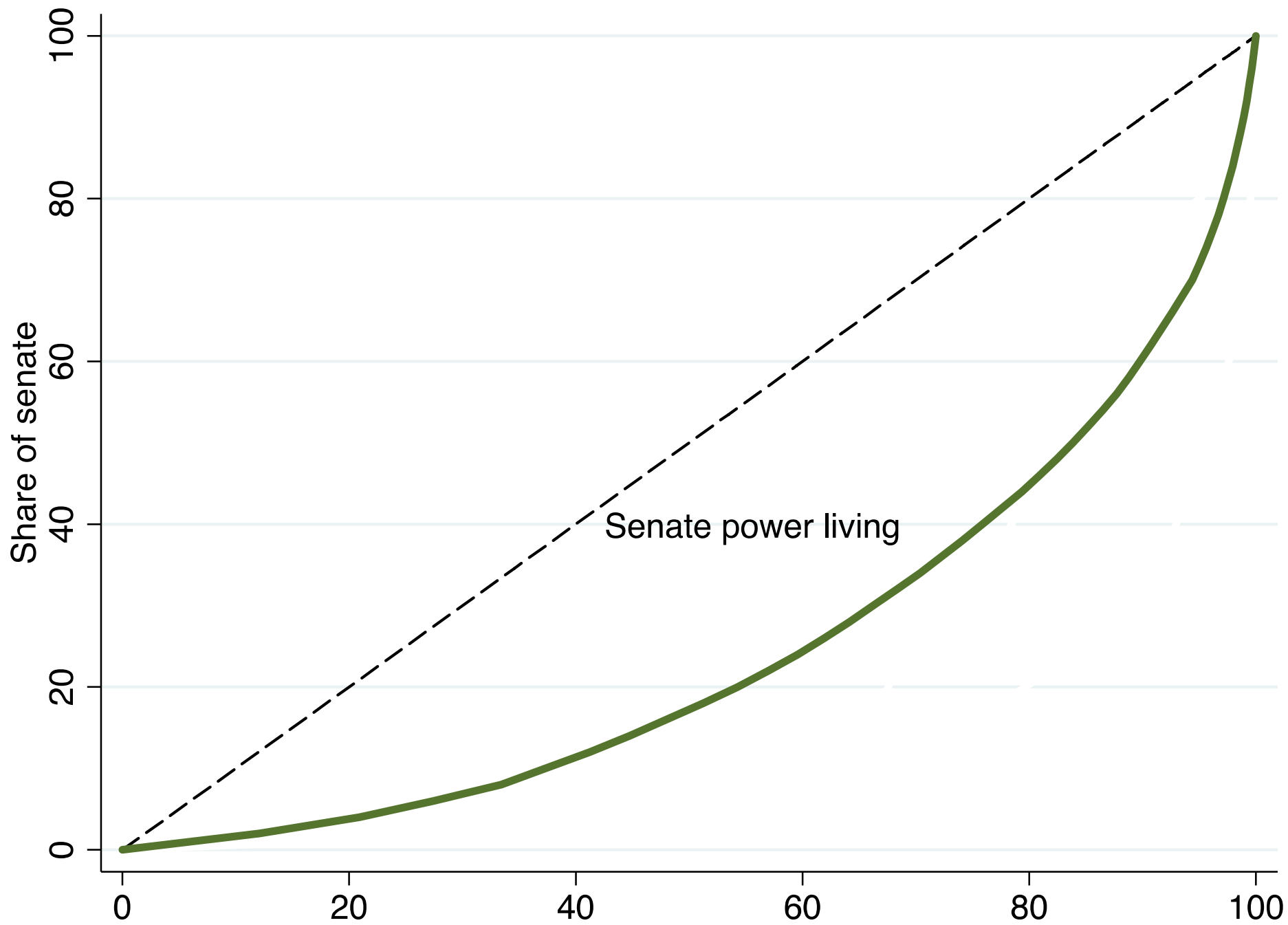
- Widen the earnings premium for a BA (currently 80 percent in the US) as well as mortality differentials

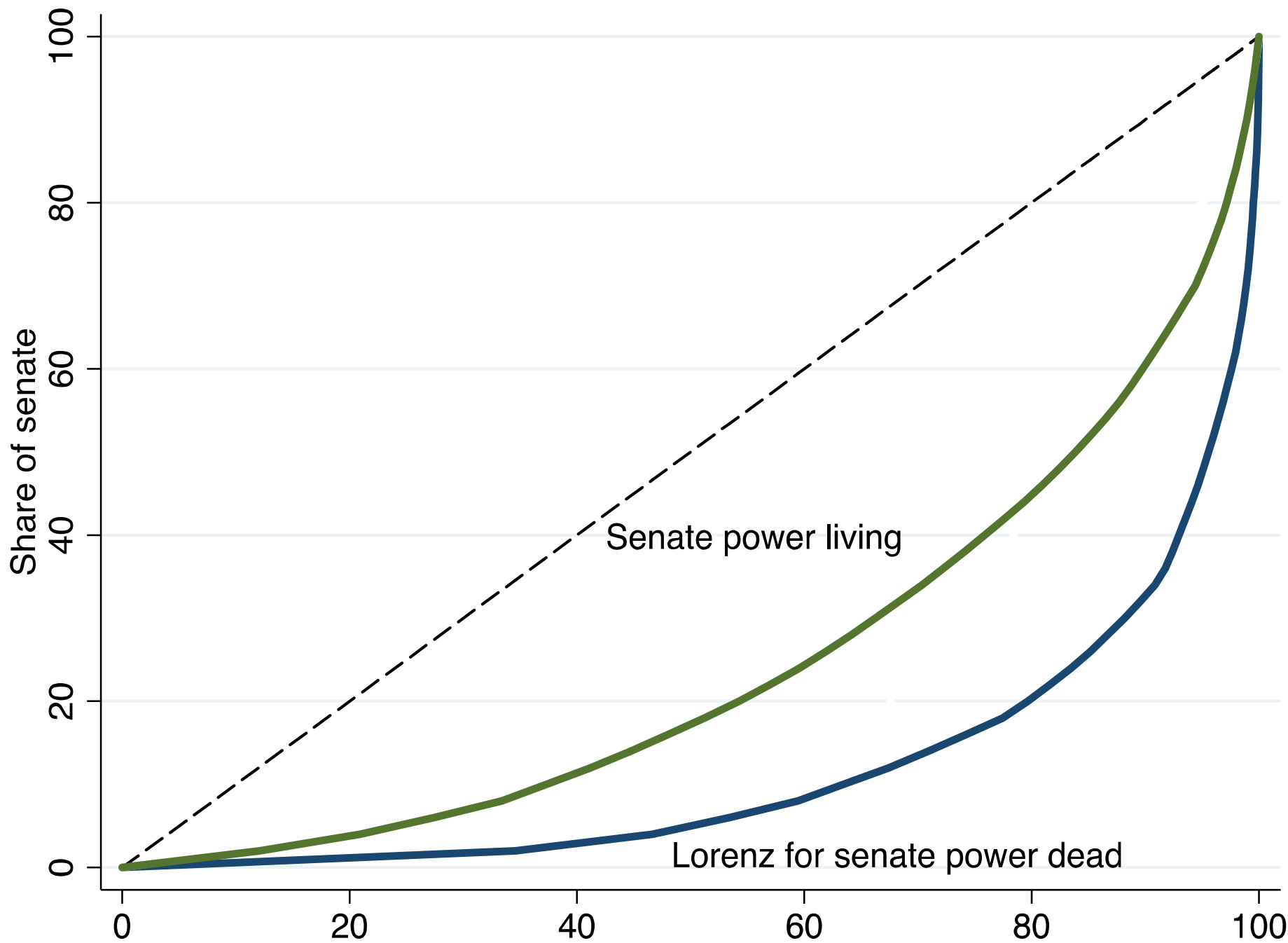
POLITICAL INEQUALITIES AND COVID

How political inequality overlays COVID

17

- Power in Senate is unequally distributed
- Four states (CA, TX, FL, and NY) have a third of the US population, but only 8 percent of Senate seats
- Gini coefficient for Senate power is 0.75
- Even more unequal for COVID deaths
- Gini coefficient for Senate power of COVID dead is 0.88
 - ▣ Red states with few deaths have blocking power over blue states with many deaths
- Even gini for House it is 0.78





Political inequalities and death

20

- 25 states have a Republican governor, 25 states have a Democratic governor
- As of March 31,
 - ▣ 687 red state deaths, 3161 in blue states, ratio is 0.22
- As of April 14
 - ▣ 4,748 deaths in red states, 21,198 in blue states, ratio is 0.22
- As of April 28
 - ▣ 10,935 deaths in red states, 41,260 in blue states, ratio is 0.27
- As of May 10
 - ▣ 17,350 deaths in red states, 56,475 in blue states, ratio is 0.31
- Covid deaths are moving from blue to red
- William Frey at Brookings has documented this for counties

Value of a statistical life (VSL)

21

- A red state governor is losing HIS business in exchange for blue state lives
 - ▣ Opening up is a no-brainer, which is why it is happening
- VSL=Value of **Someone else's** Life!

- This will change, and there will be less political difficulty about helping states in trouble
- Greater consensus for smart opening

Racial and ethnic inequalities

22

- Higher COVID-19 mortality rates among blacks and Hispanics:
- CDC argues that the COVID-19 inequalities are largely spatial

Distribution of deaths by race for US

23

	NHWhites	NHBlacks	Hispanic
% COVID deaths	52.1	21.2	16.5
% Population	60.4	12.5	18.3
% Reweighted Population	40.4	18.4	26.9

- Excess ratios for Blacks and, to a lesser extent, Hispanics, accounted for by area effects
- New York population is not the same as for the US as a whole
- Points at spatial and living arrangements, like segregation and density
- As of May 8, source CDC

Distribution of deaths NY and NJ

24

	NHWhite	NHBlack	Hispanic
NEW YORK STATE			
% of COVID deaths	66.5	14.8	14.0
% of population	73.0	8.8	11.7
NEW YORK CITY			
% of COVID deaths	29.3	24.8	26.4
% of population	32.1	22.0	29.2
NEW JERSEY			
% of COVID deaths	62.2	12.6	18.0
% of population	54.9	12.9	20.6

The population in the city is much more diverse than in the state
NJ has no disproportion: elderly in care homes predominately white?
Segregation, living arrangements, and the subway in the city

THANK YOU