

2020 COVID 19 Economics Lesson Towards a Resilient Society

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Based on New Booklet

Based on webinars + beyond http://markusacademy.Princeton.edu

Webinar speakers 2020 ... and beyond





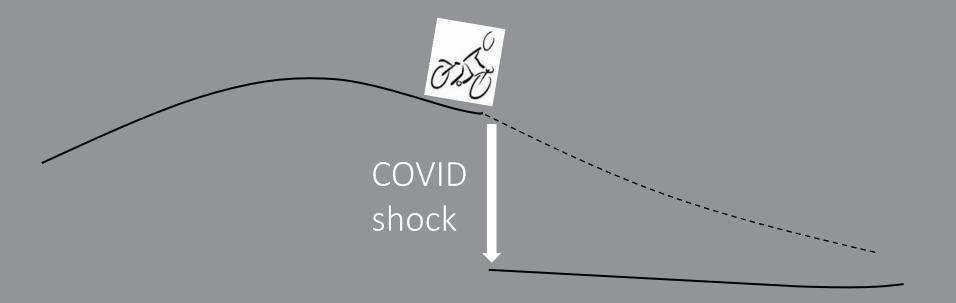
Thank your questions and for being part of it!

COVID as Naked Swimmer Moment and Trend Accelerator M



- Health externalities
 - No universal health care
 - No sick leave
 - Higher death rate across minorities

- Trend accelerator
 - Optimal speed growth vs. disruption (human capital)



Resilience



- Risk management
 - Variance
 - Tail Risk Analysis

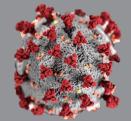
- squeezed between concrete wall



- Resilience management squeezed between rubber wall
 - Mean-reversion bounce back



roly-poly toy

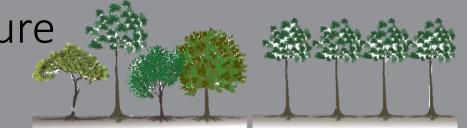


Trap Avoidance Analysis

Resilience: Diversity, Flexibility, Growth



Diversity vs. Monoculture



- Shocks are more idiosyncratic than symmetric
- Reduced willingness to insure each other (Alesina)

Flexibility



- Growth
 - Bicycle analogy

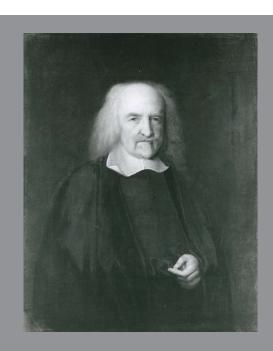


"A social contract that boosts inclusive growth stabilizes the social contract."

Social contract



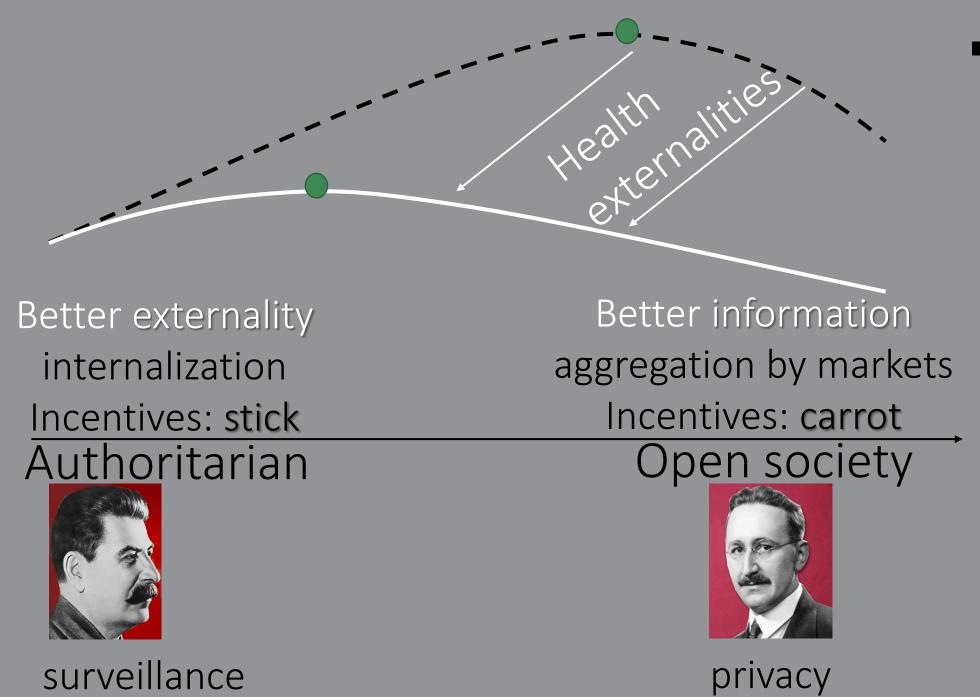
- Thomas Hobbes, (Leviathan, 1651),
 John Locke,
 Jean-Jacques Rousseau
 - An externality interpretation



- Social contract to limit/make us resilient to
 - Externality from others
 - Shocks (externalities from mother nature)
 - John Rawls and the "veil of ignorance"
 - Not insure, but provide resilience
 - Ladder to get out of the hole not universal basic income
 - Dignity and limits moral hazard

Temporary or permanent shift?





Will we return to the pre-COVID social order?

■ Role of Social Norms (Japan, ...)

Overview: Resilient Society



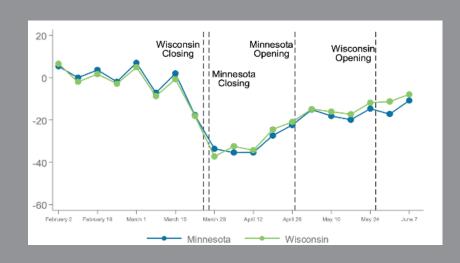
- Social contract
- COVID Health Resilience management
- Long-run effects: Innovation and Scarring
- Macro, Money and Finance
 - Financial Whipsaw (IPO boom)
 - Public Debt challenge
 - Inflation Whipsaw: Deflation/inflation traps
 - Inequality
- Global Resilience

What changes people's behavior (social distancing)?



1. Wave: COVID Fear

- Sweden vs. Denmark
- Wisconsin vs. Minnesota



Government communication

Chetty et al. (2020)

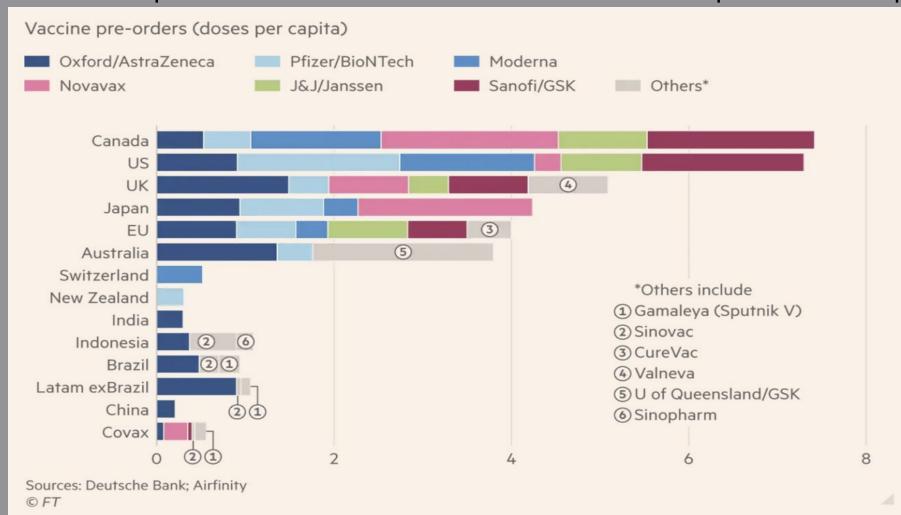
2. Wave: COVID Fatigue/Denial

- Endowment effects
- Optimal Expectations (Brunnermeier & Parker, 2005)
 - Optimistic beliefs if it doesn't distort behavior
 - Government limits choice
 - Externality

Testing/Vaccine production



- Cost of testing is tiny
- Vaccine costs are tiny compared to lockdown
 - Develop 14 in parallel redundancy
 - Develop vaccines with low correlation portfolio approach



Sources: FT, Deutsche Bank, Airfinity

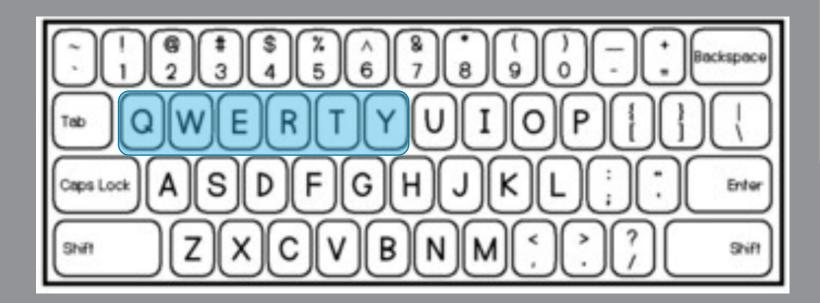
Innovation boost: trend accelerator or QWERTY jump



Innovation

Overcoming cannibalization, QWERTY problem, and regulatory shackles

- Tele medicine
- Home office and real estate donut effect
- Online learning/conferencing
- Digital Money
- Virtual world







Scarring → slow recovery

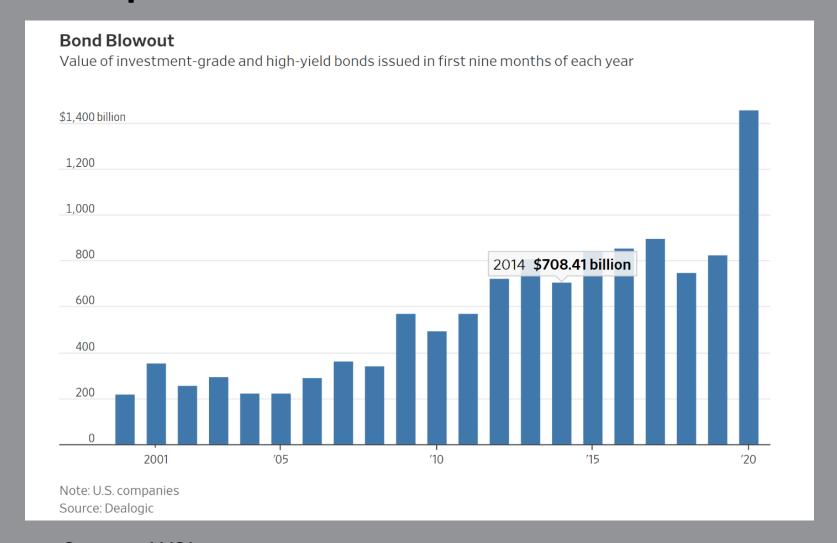


- Belief scarring
 - Less risk taking, more savings
- Labor market scarring
 - Women > men (unlike previous recessions)
- Firm scarring
 - Debt overhang problem
 - SME (chapter 7) vs. large firms (Chapter 11)

"Financial Markets Whipsaw"



- March 2020 shivers followed by strong recovery
 - Stock market record heights IPOs like during NASDAQ bubble
 - Gov. bond market shivers CB: Market maker of last resort
 - Corporate bond marketCB: Tail risk removal

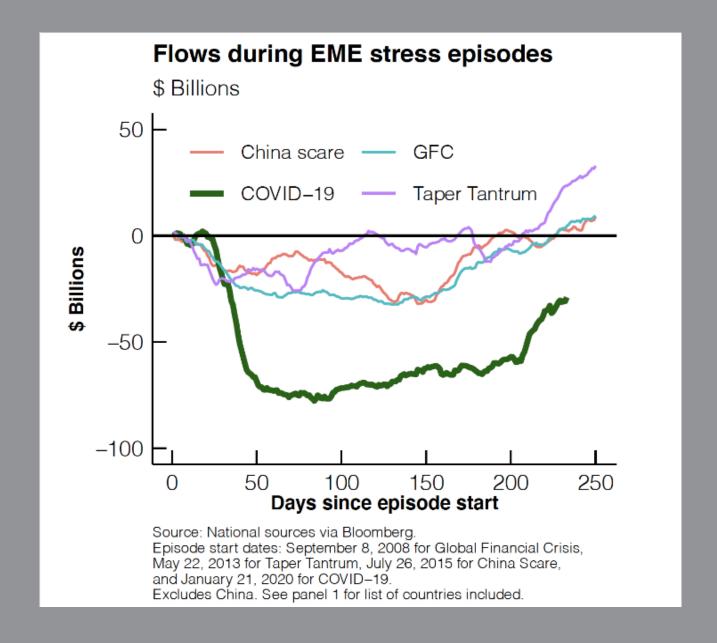


Source: WSJ

Global Financial Crisis – averted in March 2020



Flight to safety in the US dollar



Fed interest rate cut and repo facility

High Public Debt Levels, but low interest rates

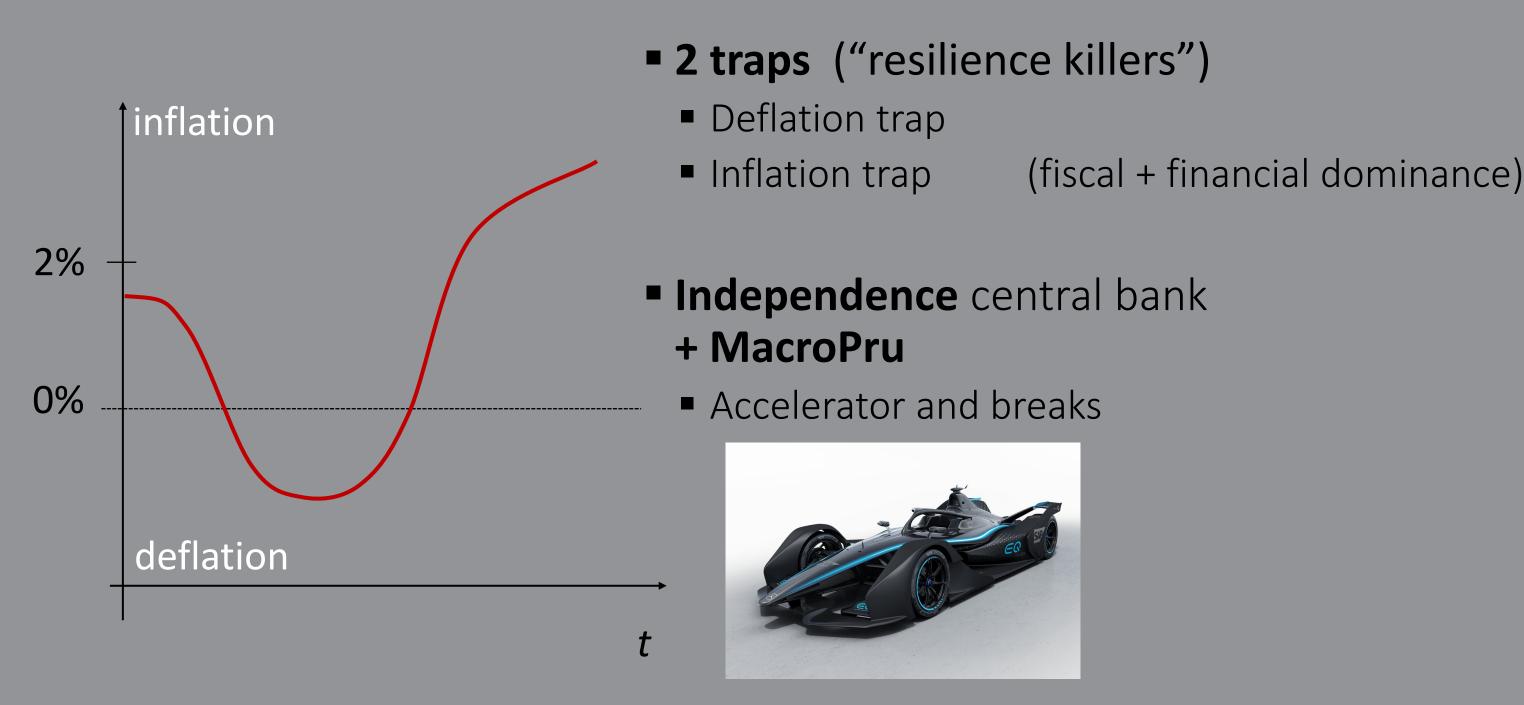


- Debt/GDP vs. Value at Risk (Debt servicing cost | ·)
- Asset pricing formula with second term

- Safe asset service flow: Precautionary savings + retrading (to partially insure idio risk $\tilde{\sigma}_c^2$) ⇒ low real interest rate $r^* = \rho + \gamma g - \frac{1}{2}\gamma(\gamma + 1)\sigma_c^2 - \Delta i$
- Safe asset status of gov. bonds bubble feature that can pop
 - Fiscal space to "defend bubble"

Tail/Trap Risk: "Inflation whipsaw"

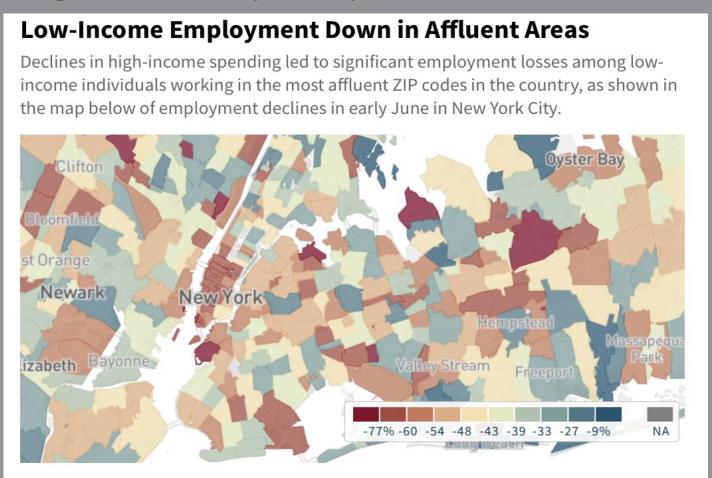




Inequality of Resilience



- Households' savings too small to be resilient
- Regional inequality: Poor in affluent neighborhoods



- Racial gap
- Online education gap
- Income vs. wealth: valuation effects

Global Resilience



- EMDE: Visible vs. invisible Health, Life vs. livelihoods
- Limited policy space: crisis and recovery phase
 - Fiscal response: 20%, 6%, 2%
- Debt restructuring
- "Slowbalization" only (in trade)
 but deglobalization (in services, technology transfers)
- Global value chains
- From cost minimization to

Just-in-Time

Resilience
Just-in-Case, dual sourcing

