



COVID-19: Economic Implications and Policy Response

NEED: ThinkTank Thursday
April 2, 2020

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National Economic Education Delegation

• Vision

- One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.

• Mission

- NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States

• NEED Presentations

- Are **nonpartisan** and intended to reflect the consensus of the economics profession



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Who Are We?

- **Honorary Board: 47 members**

- 2 Fed Chairs: Janet Yellen, Ben Bernanke
- 6 Chairs Council of Economic Advisers
 - o Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
- 3 Nobel Prize Winners
 - o Akerlof, Smith, Maskin

- **Delegates: 500+ members**

- At all levels of academia and some in government service
- All have a Ph.D. in economics
- Crowdsource slide decks
- Give presentations

- **Global Partners: 45 Ph.D. Economists**

- Aid in slide deck development



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Available NEED Topics Include:

- **US Economy**
- **Climate Change**
- **Economic Inequality**
- **Economic Mobility**
- **US Social Policy**
- **Trade and Globalization**
- **Trade Wars**
- **Immigration Economics**
- **Housing Policy**
- **Federal Budgets**
- **Federal Debt**
- **2017 Tax Law**
- **Autonomous Vehicles**



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Credits and Disclaimer

- **This slide deck was authored by:**

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- Jon D. Haveman, NEED

- **Disclaimer**

- NEED presentations are designed to be nonpartisan.
- It is, however, inevitable that the presenter will be asked for and will provide their own views.
- Such views are those of the presenter and not necessarily those of the National Economic Education Delegation (NEED).



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Outline

- **What does economics offer?**
- **Economic implications**
- **Vulnerabilities**
- **Evidence**
- **Policy**



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What Does Economics Offer?

- **Insight into the transition of the virus from health to the economy.**
- **Data on the magnitude of economic vulnerability.**
- **Cost benefit analysis of social distancing.**
- **Insight into government response:**
 - Appropriate targets of government policy
 - Evaluation of current measures
 - Fiscal and monetary policies
 - What else might be done and why?



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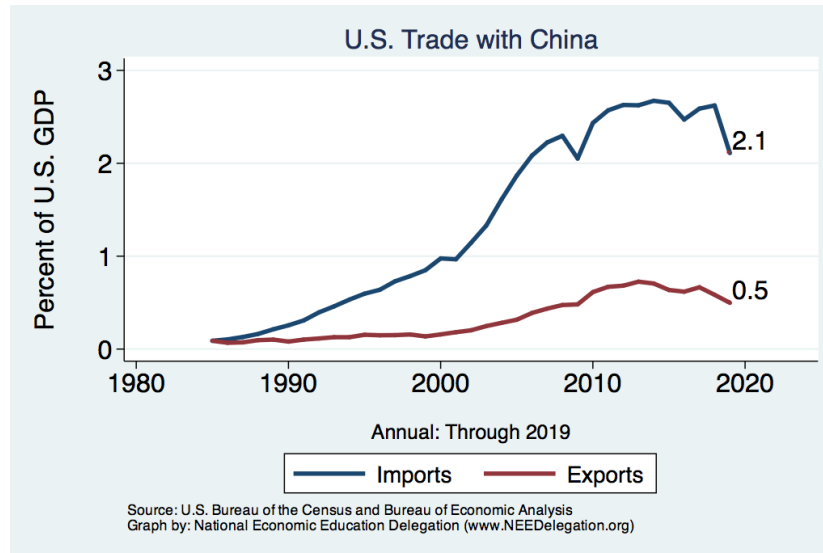
Perfect Storm for the Economy

- **Supply side**
- **Demand side**
- **Financial**

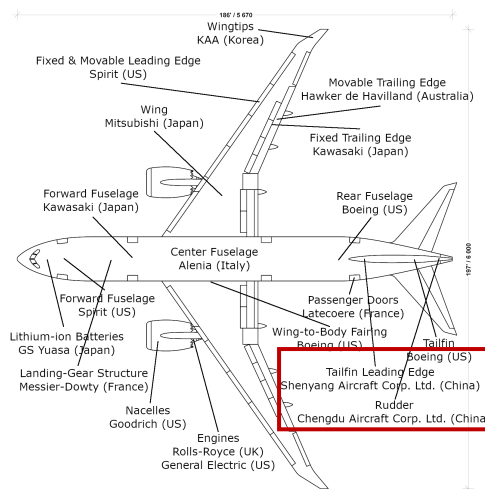


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Trade with China is Significant, but Small



Coronavirus: Supply Chains

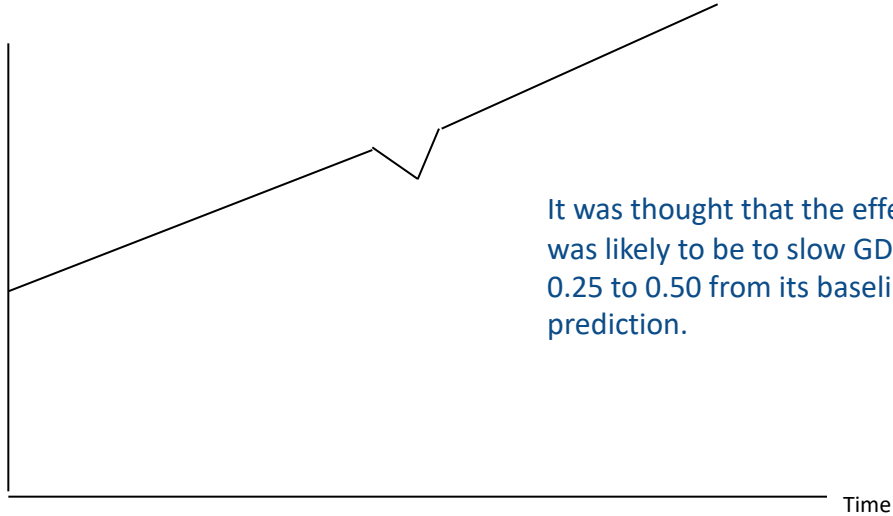


- Boeing 787 Dreamliner
- Parts and components from suppliers all over the world:

- Japan
- Italy
- China
- Australia
- ...

Modest Impact on GDP of COVID-19

GDP per Capita



It was thought that the effect was likely to be to slow GDP by 0.25 to 0.50 from its baseline prediction.

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The Escalation of the Economic Effects



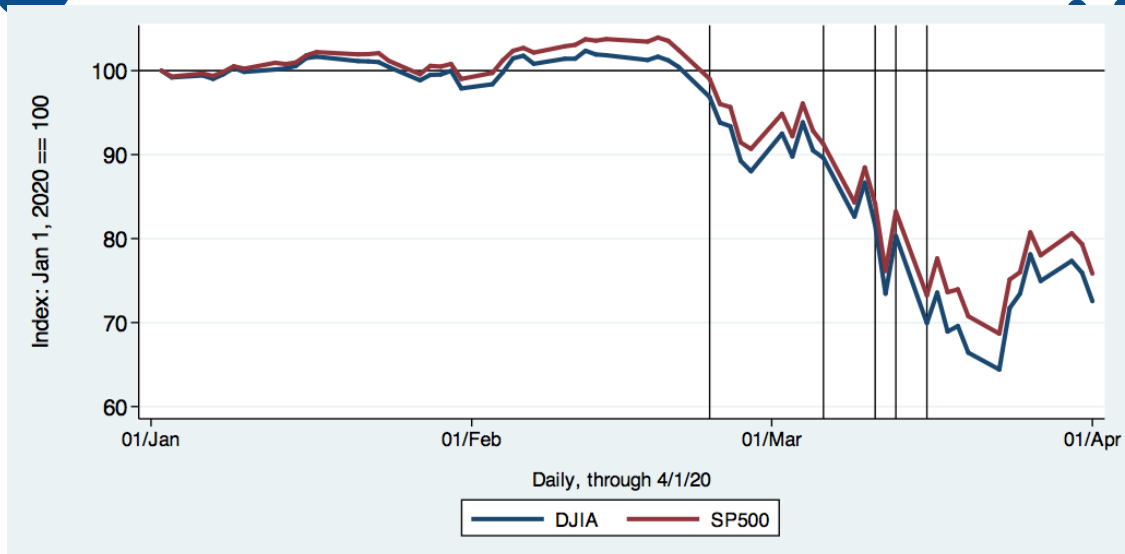
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Coronavirus: Demand Side

- **Stock market**
 - Postpone major purchases
- **Event cancellations**
 - More broadly tourism
- **Universal pseudo-quarantine**
 - Work from home
 - Eat at home
 - Watch movies at home

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DJIA and S&P 500



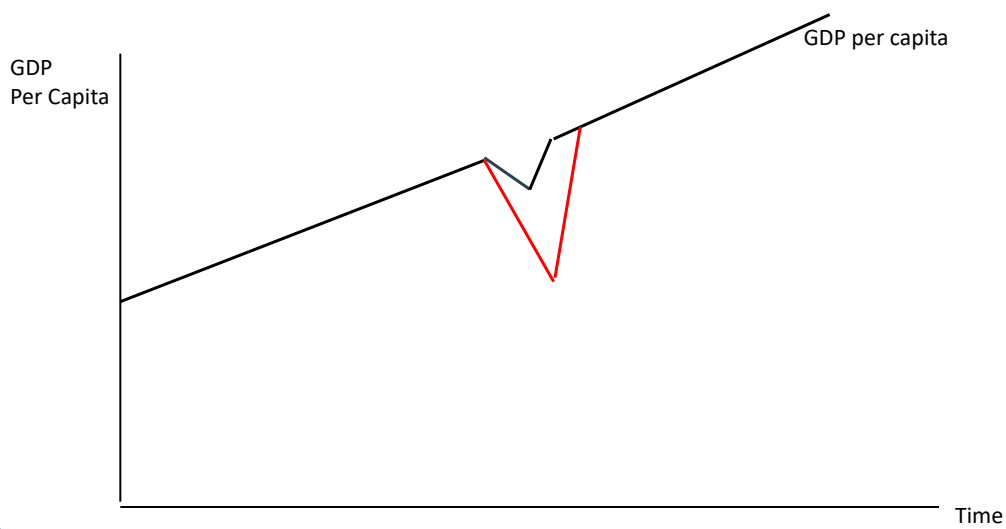
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Particularly Vulnerable Industries

Industry	Share of GDP
Arts, entertainment, and recreation	1.1
Management of companies and enterprises	1.9
Other services, except government	2.1
Accommodation and food services	3.1
Transportation and warehousing	3.2
Retail trade	5.5
Educational services, health care, and social assistance	8.7
Manufacturing	11.3
Real estate and rental and leasing	13.3
Total	50.2

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Impact on GDP of COVID-19 – No Social Distancing

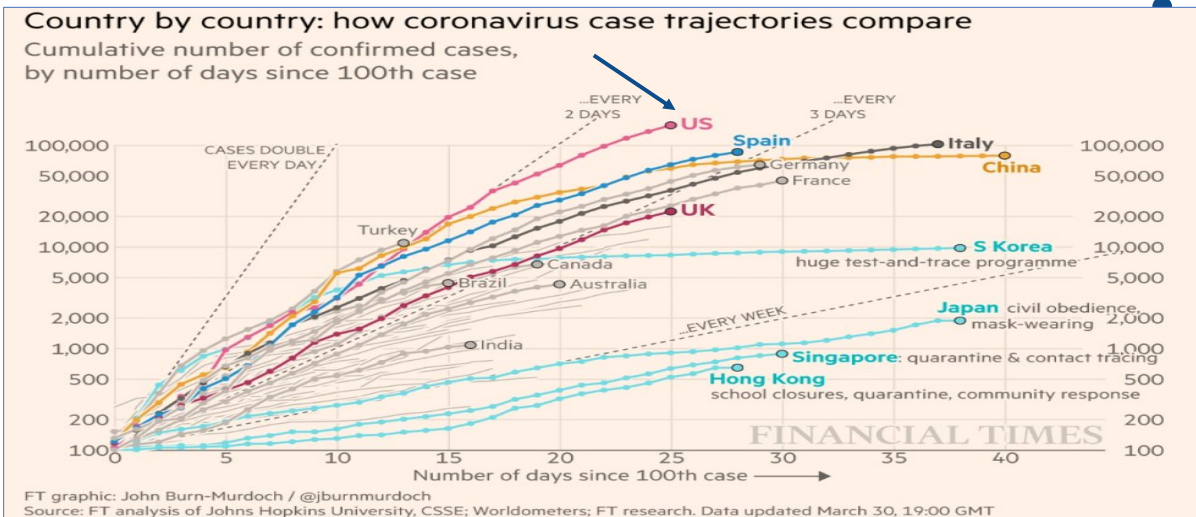


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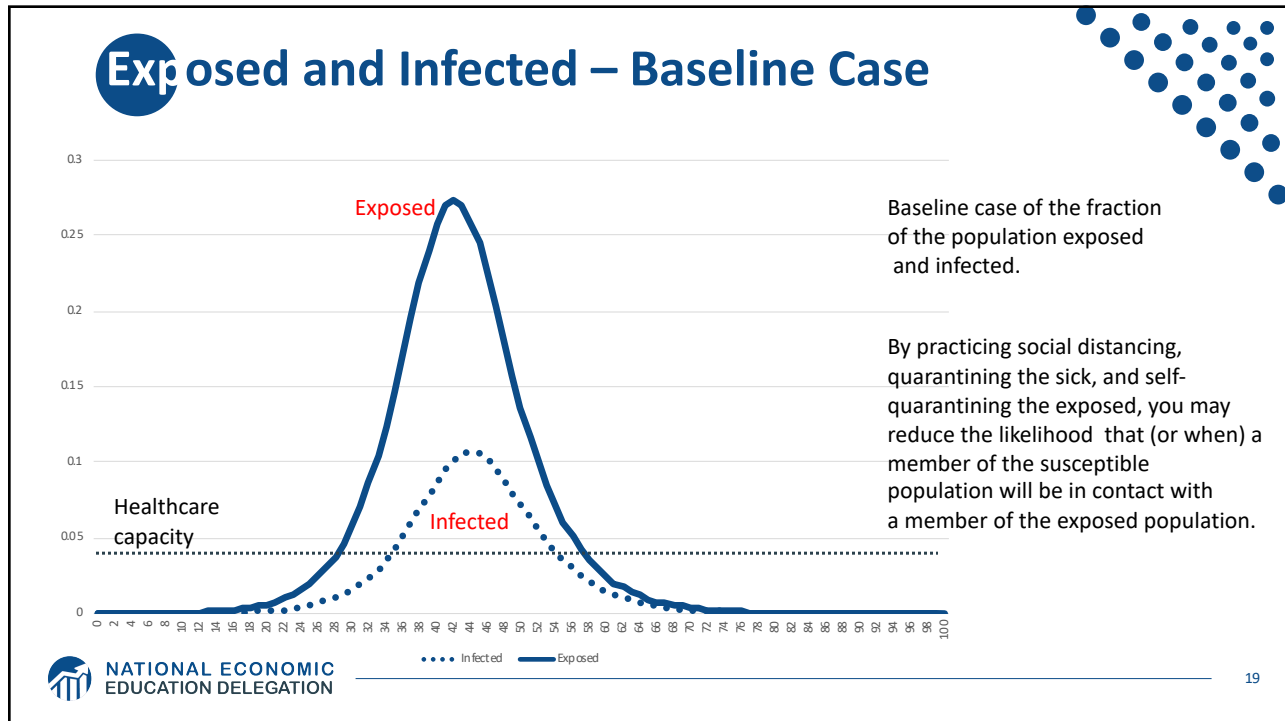
Epidemiology

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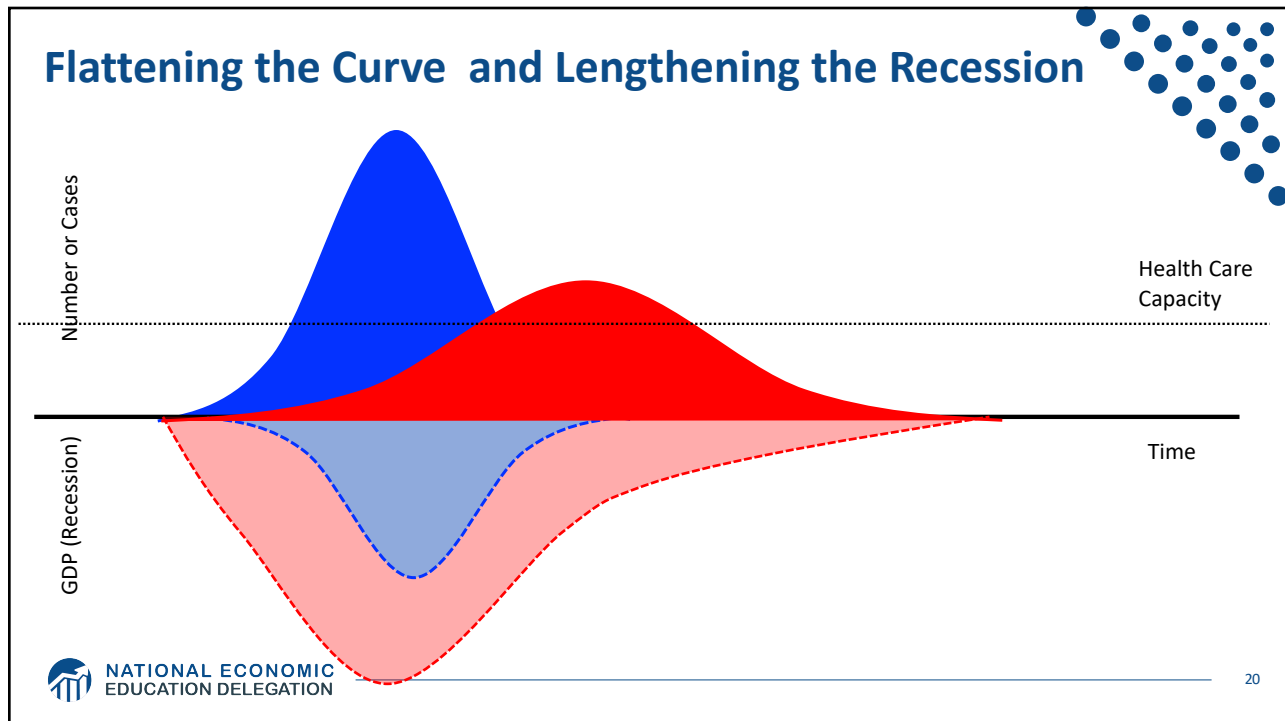
Confirmed Cases by Country



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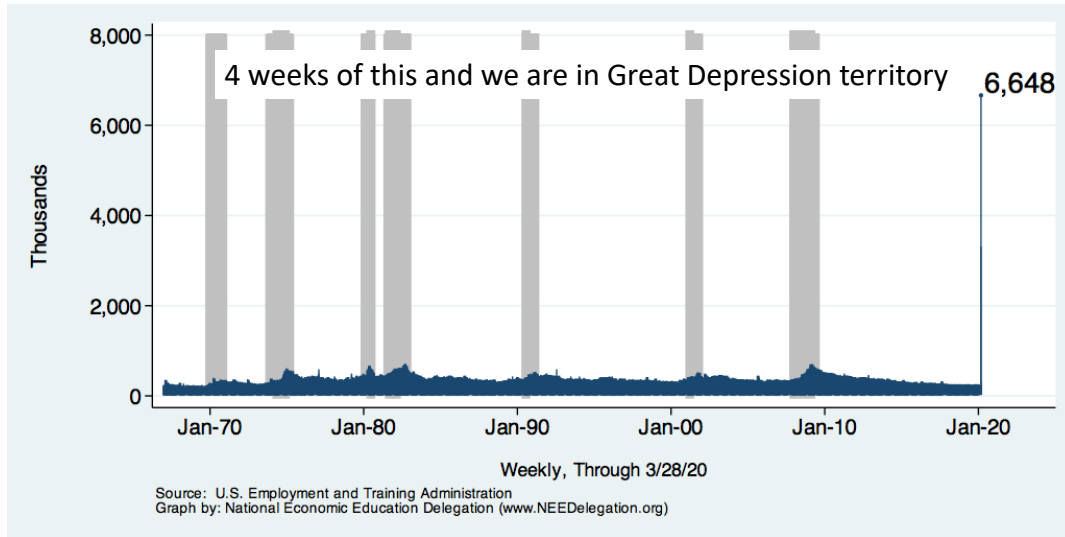


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Weekly New Unemployment Claims

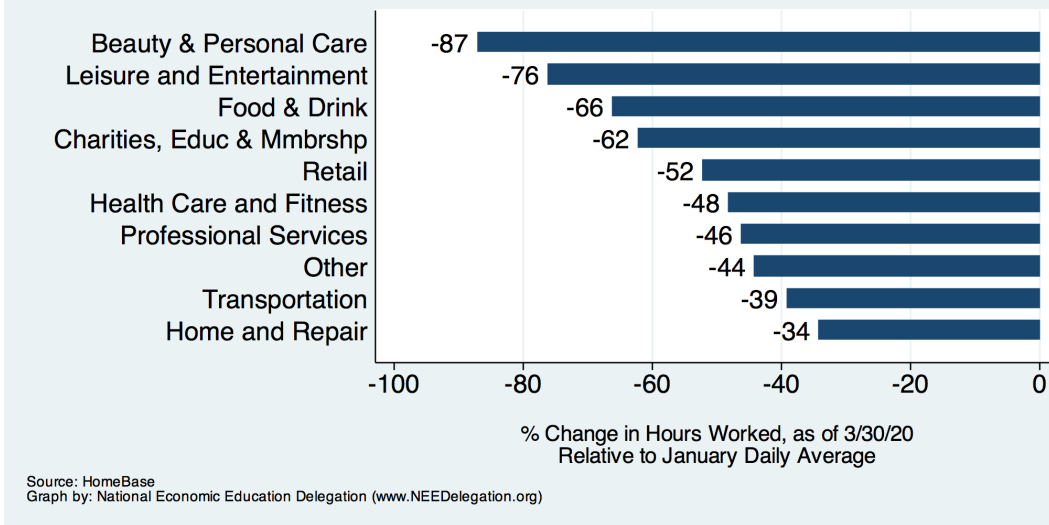


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Percent Change Hours Worked: Nationwide

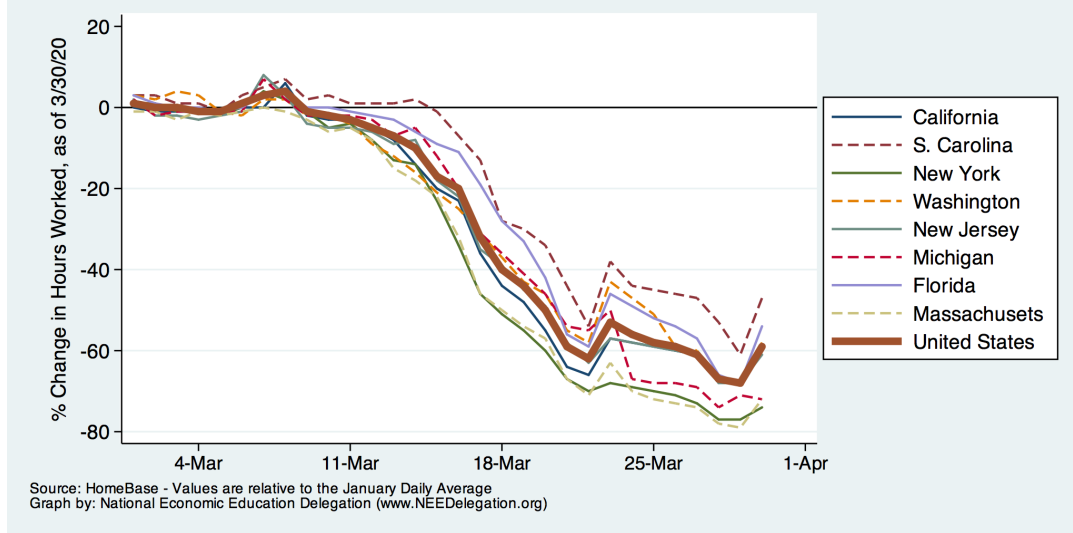


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Change in Hours Worked: States

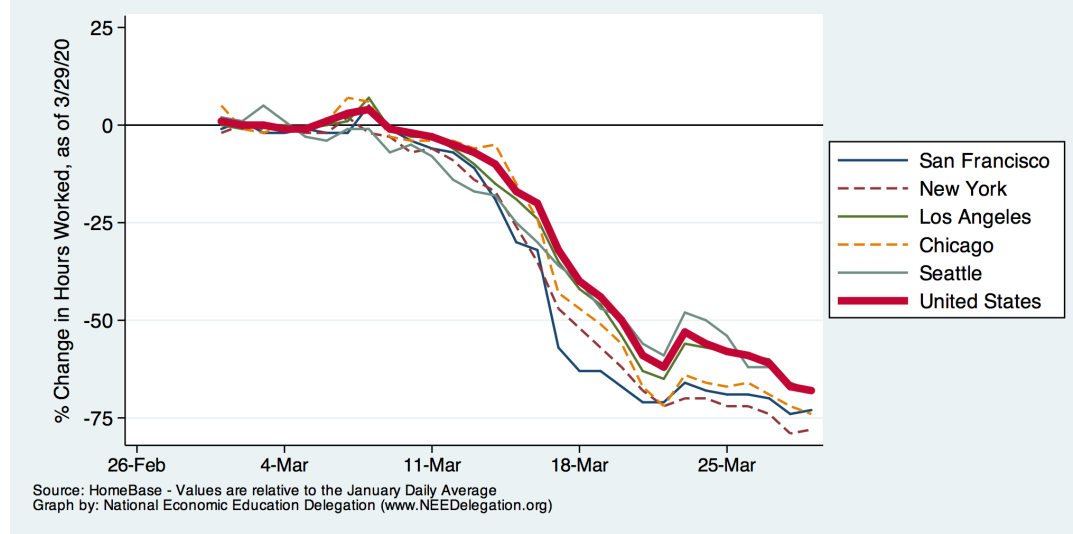


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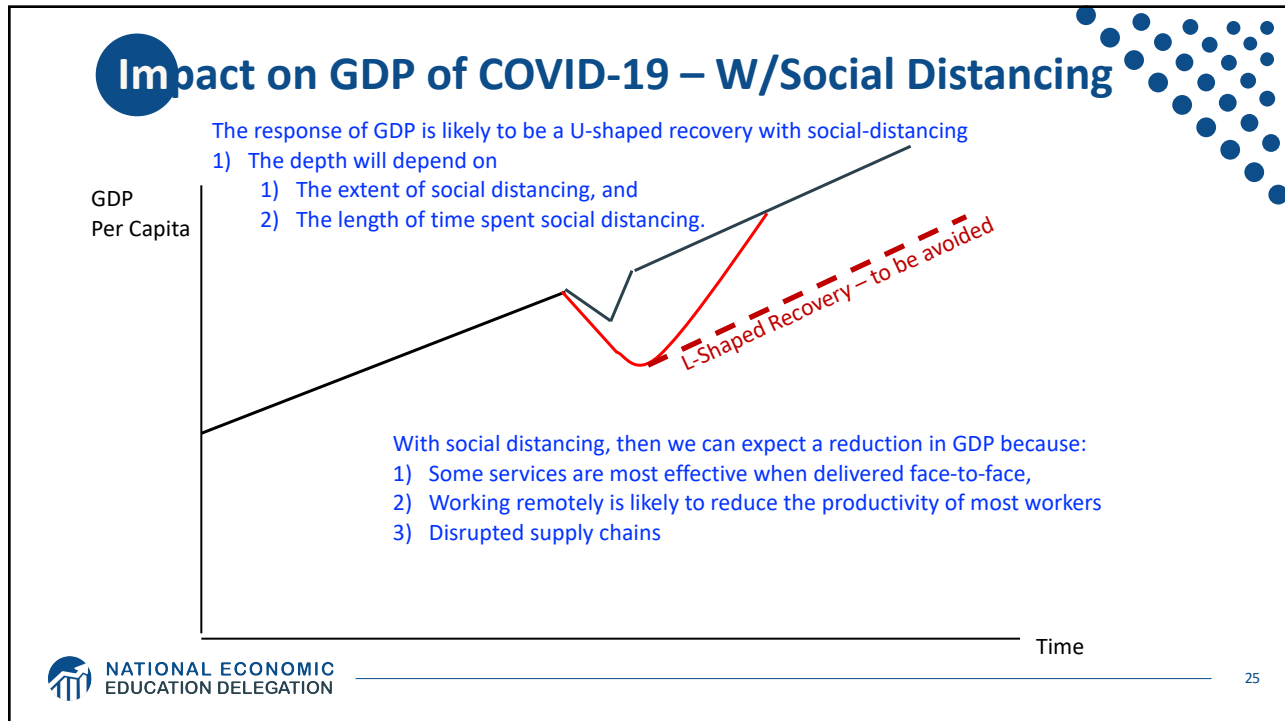
Change in Hours Worked: MSAs



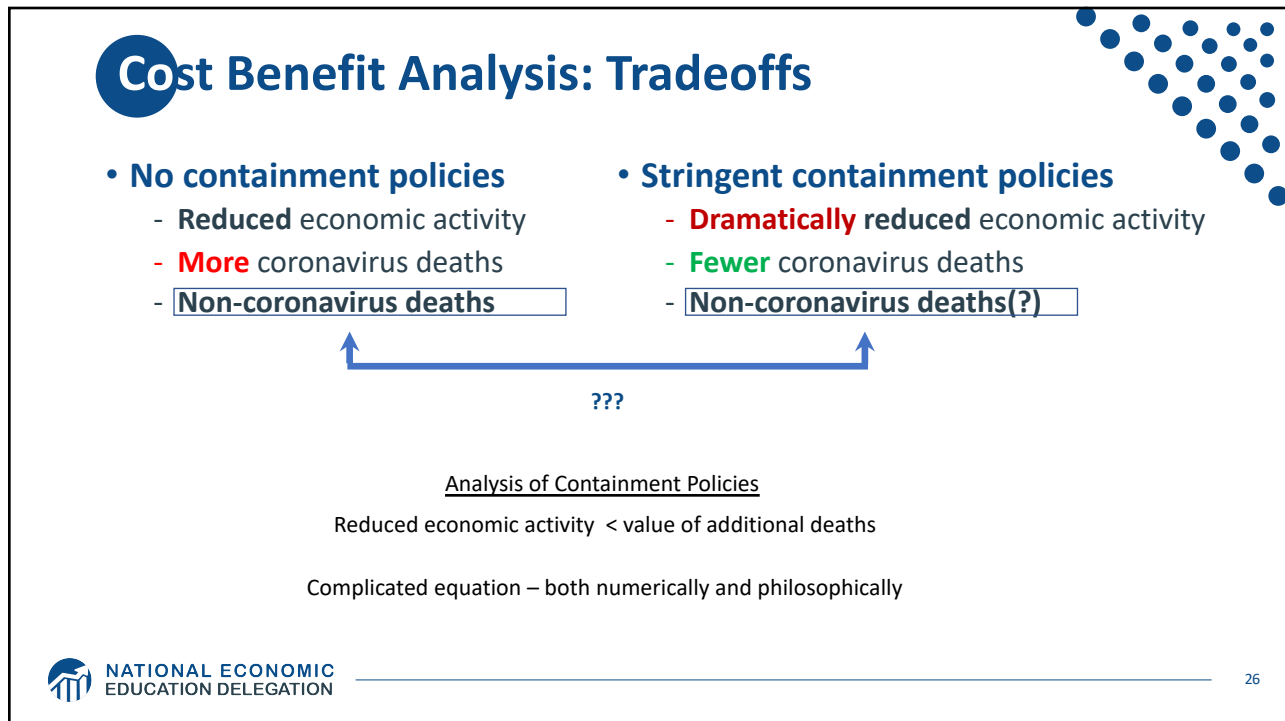
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Cost Benefit Analysis: Some Additional Info

- **Value of a statistical life: \$5-14 million**
 - Depends on what the right value of a life is.
 - Depends on net difference in # of deaths.
- **Size of the economy: ~\$2 trillion per month**
 - Depends on economic impact
 - Of containment polices
 - Of unabated virus



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BOTE Cost Benefit Analysis

BOTE: Back Of The Envelope

- If we evaluate the the value of a statistical life at \$7 million, and
- we think that social distancing reduces the number of deaths by 600,000
- **Benefit of Saved Lives is: \$4.2 Trillion**
- **Survivors may face long-term health effects – 2 million valued each at \$500,000**
- **Survivor Cost: \$1 Trillion**
- **Total Benefit of Social Distancing: \$5.2 Trillion**



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BOTE Cost Benefit Analysis

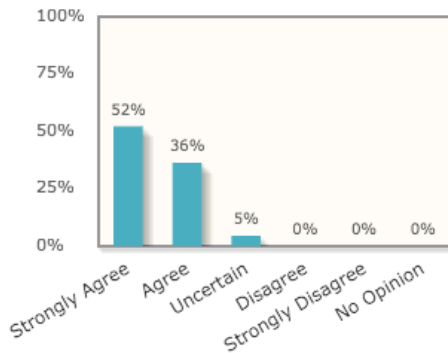
BOTE: Back Of The Envelope

- Cost of “Shelter in Place” or “Lockdown”
- The cost of a non-workday reduces unadjusted quarterly GDP by about 0.4%.
- There are about 60+ workdays in a quarter and we lost about 1/8 or March.
- **The cost of a “lockdown” is roughly \$1.3 Trillion**

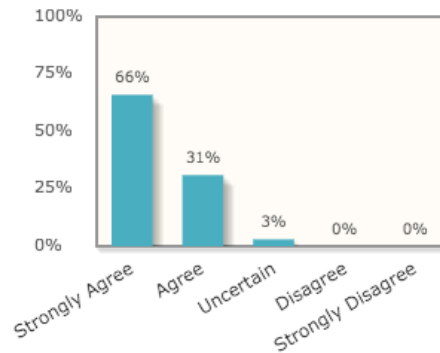
University of Chicago – Experts Poll

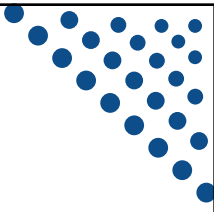
Question A: A comprehensive policy response to the coronavirus will involve tolerating a very large contraction in economic activity until the spread of infections has dropped significantly.

Responses




Responses weighted by each expert's confidence





Economic Crisis Tools

Fiscal and Monetary Policy

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Priorities for Policy

- **Policies to protect public health**
 - Long run benefits for the economy.
 - Though there may well be short run pain.
- **Policies to protect the economically vulnerable**
- **Policies to maintain resiliency of the economy**
 - Help firms stay in business, maintain ties with workers
- **Policies to stimulate aggregate demand**
 - Long run – once the economic switch is turned back on

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Fiscal Policy Timeline

Phase	Amount (\$ bn)	Action
Phase 1 March 6	\$8	Emergency response, health care, vaccine development, prevention
Phase 2 March 18	\$100	Paid sick leave, unemployment insurance, free virus testing
Phase 3 Pending	\$250	Direct cash payments to families with income cap; \$1,200 per adult, \$500 per child
	\$250	Enhanced unemployment benefits
	\$350	Small business loans up to 250% of monthly payroll
	\$100	Corporate tax changes
	\$17	Community lending
	\$500	Loans & loan guarantees for businesses, incl. airlines
	\$180	State and local governments & Education
	\$100	Hospitals
TOTAL	\$1.5-2.5 Trillion	7-12% of GDP

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The Most Important Roles of Monetary Policy

I. Macroeconomic Stabilization

- Raise aggregate demand by changing interest rates. To raise demand it needs to lower interest rates
 1. Traditional Monetary Policy uses open market purchases of short-term US Treasuries to lower short-term interest rates (in particular the federal funds rate).
 2. Quantitative Easing (QE) is where the Fed buys long-term Treasuries and Mortgage-backed securities to more directly affect these rates.

II. Insuring Liquidity in Lending Markets by acting as the “Lender of Last Resort”

- The Fed has unlimited access to dollars and when the private sector does refuses to make illiquid loans, the Fed can. This ensures that borrowers have access to credit.
 1. The Fed can make loans directly or by buying new debt issues (thereby increasing “market liquidity.”)
 2. The Fed can also provide loans to intermediaries, so that they in turn can provide loans to customers. (there by increasing “funding liquidity”)

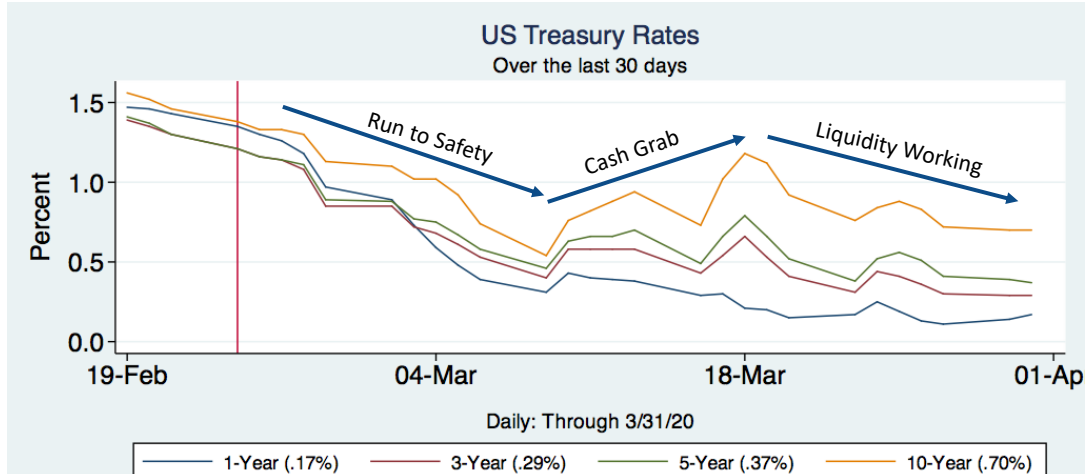
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Monetary Policy Timeline

	Date	Action
Stabilization	March 3	Fed Funds Rate Lowered 1.75-1.5 to 1.25-1
	March 15	Fed Funds Rate Lowered to 0.25-0 Announced QE of \$700 billion
Liquidity	March 17	Commercial Paper Funding Facility Primary Dealer Credit Facility
	March 18	Money Market Mutual Fund Liquidity Facility
	March 23	Primary Market Corporate Credit Facility Secondary Market Corporate Credit Facility Term Asset-Backed Securities Loan Facility Unlimited QE
	TBA	Main Street Business Lending Program

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US Treasury Rates: A Safe Haven?



Source: Board of Governors of the Federal Reserve System. Red line is Feb-24, the first day of significant stock market declines.
Graph by: National Economic Education Delegation (www.NEEDelegation.org)

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What is next and what else can be done?

- **How do we pay for it?**
 - Run larger deficits
 - Run the printing press MMT
 - Firms and/or individuals borrow through Treasury
- **Additional fiscal measures.**
 - Buyer of last resort (Piketty and Zucman)
 - Employer of last resort (MMT)
- **Additional cash disbursements.**
- **Ultimately: more fiscal policy to restart the economy.**



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What have we learned? Positive Take-Aways

- **May improve the delivery of some services.**
- **Encourage firms, households, governments to have a business continuity plan.**
- **In an integrated world, this will likely not be the last pandemic...**
 - Improve social insurance for these types of events.
 - Allow more flexibility to governments and firms to respond.
- **Potential learning to be carried forward:**
 - Telecommuting
 - Telehealth
 - The value of the "walk around the block".



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Big Open Questions

- **When will the dust settle?**
- **When the dust settles:**
 - How close will ties be between businesses and their pre-CV employees?
 - How much will the business environment change?
 - More automation?
 - More telecommuting?
- **Broadly speaking: How quickly can things bounce back?**
- **What will the overall economic cost be.**



Conclusion

- **COVID-19 is a health crisis that has extreme macroeconomic implications.**
- **Negative GDP growth 2020:Q2. -25% is possible.**
- **The macroeconomic effects are derived from a perfect storm.**
 - Supply, demand, and financial.
- **Fiscal and monetary response should be targeted at health crisis first and income and employment maintenance.**
- **Broad agreement among economists: Cure < Disease**
- **Have to be ready to stimulate the economy when health crisis is over.**



Thank you!

Any Questions?

www.NEEDelegation.org

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