COVID-19: INVESTMENT AND FEDERAL LEADERSHIP TO OPEN THE ECONOMY AND PREVENT A SECOND (OR THIRD) WAVE OF THE PANDEMIC

The US faces an extremely challenging 12 to 18 months ahead before a vaccine is developed. The central challenge of this moment is to plan for, fund, and execute a safe reopening of economic and social life before a vaccine is released.

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There is a strong consensus among mainstream economists that the "first rule of pandemic economics" is to fight the cause of our economic problems: the COVID-19 virus itself. The recent two trillion dollar short-term financial aid bill was critical to offset the tremendous economic suffering caused by the enforced shutdown of so much of our economy. However, it did little to address the underlying cause of the crisis. In our opinion, we should be willing to spend hundreds of billions of dollars directly to fight the virus. This funding should be allocated towards vastly expanding testing, contact tracing, the production of medical equipment, and the developments of vaccines and treatments. Spending at this level is orders of magnitude larger than the present efforts and is proportional to the challenges we are facing and harm generated by COVID-19.

The Largest Risk We Face is a Second or Third Large-Scale Pandemic Wave

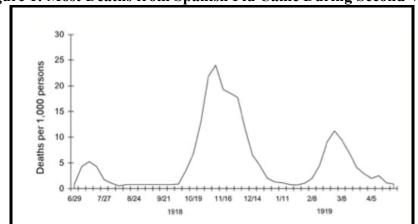


Figure 1: Most Deaths from Spanish Flu Came During Second Wave

Notes: Three pandemic waves: weekly combined influenza and pneumonia mortality, 1918-1919 ²

¹ This "first rule" is typically credited to economist Austan Goolsbee. A survey of leading economists shows that all support the government spending more to address COVID-19, http://www.igmchicago.org/surveys/policy-for-the-covid-19-crisis/. There have been similar statements in other letters, for example the Aspen Institute's letter from leading economists https://economicstrategygroup.org/resource/economic-strategy-group-statement-covid19/ and a letter from 800 economists https://www.columbia.edu/~wk2110/Corona/Statement.html.

² Taubenberger and Morens, 2006. Emerging Infectious Diseases

Most deaths from the 1918 Flu came during its second wave. A second substantial wave of the COVID-19 pandemic in the US would trigger a second large-scale lockdown and necessitate another round of costly stimulus. This would be a body blow to an already reeling economy to say nothing of the devastating health consequences.

As a result, it is vital to put proper safeguards in place to mitigate the risk of a severe second (or third) wave of the pandemic. Creating the conditions for a safe reopening of the nation necessitate coordinated federal leadership in three domains:

- 1. Undertaking technical analysis in real time to determine how to address the pandemic, treat the ill, test for the virus, and create the conditions necessary to safely and efficiently reopen the economy; and
- 2. Helping to fund and driving the development and production of tests for COVID-19, PPE for health care workers, masks for the public, vaccines, protective equipment, and treatments to address the pandemic.
- 3. Funding all COVID-19 testing in the US.

Scaling the Need for Investment

Estimates suggest that GDP will be reduced by up to 35% during the lockdown, which would equate to economic losses on the order of \$19 billion per day.³ This implies that every week we shorten the virus' impact would deliver more than \$100 billion in economic benefits. A simple totaling of the daily cost suggests that we should be willing to pay amounts on the order of \$1 trillion to shorten the crisis by two months, keep the economy open, and lower the chance of the pandemic reemerging. Of course, the direct benefits to our collective health vastly increase the potential benefits.

Moreover, policy and scientific uncertainty are compounding the deleterious effects of the shutdown on the economy.⁴ A credible signaling of a quicker end of the crisis, for example calling for wartime-like levels of public health investment, would boost confidence. A credible signal of this sort would induce private businesses to retain more of their employees and/or to obtain private funding to protect more of their specialized assets from the prospect of liquidation

Reopening the Economy

The core challenge we face when reopening the economy is keeping transmission rates ($R_{\text{effective}}$) below one while loosening social distancing. There are a range of credible plans for reopening the

³ See, for example https://www.bloomberg.com/news/articles/2020-04-14/goldman-sees-advanced-economies-shrinking-35-amid-

 $pandemic?cmpid=BBD041420_OUS\&utm_medium=email\&utm_source=newsletter\&utm_term=200414\&utm_campaign=openamericas$

⁴ See "COVID-Induced Economic Uncertainty" by Baker, Bloom, Davis and Terry (2020): https://bfi.uchicago.edu/working-paper/covid-induced-economic-uncertainty/

economy.⁵ These range from condition-based "Test and Trace" plans to "Test-centric" plans, which would rely on the largest increases in testing. However, all the plans for reopening the economy necessitate substantial increases in the production of PPE and COVID-19 testing, the discovery and deployment of treatments that mitigate symptom severity, and robust track and trace infrastructures. This will require vastly more direct federal funding and coordination.

Relying on More than the Markets

The private sector will be an essential ally but requires appropriate assistance to help solve our collective challenge. However, businesses face a complex problem: the costs of re-tooling and expanding production of the necessary equipment and innovation we need – masks, testing, treatments - are high, while future demand is uncertain. For individual actors without collaboration, it will often be rational to wait and see how events turn out. For example, a private investment in ventilators may be undercut by an otherwise welcome advance in drug treatment. Even those who seek to expand production find the same problems plaguing their upstream suppliers of parts and materials, causing delays and limited production.

The shortage of masks and PPE, in part, is the result of a market failure: the reimbursements for lab tests and PPE do not reflect the positive externalities of those products. The positive externalities of testing and PPE are at such a large scale that they justify substantial and strategic federal investment and engagement.

Driving up The Production of COVID-19 Tests

Relaxing social distancing and reopening the economy will require a massive increase in COVID-19 testing. Depending on the plans adopted, "Track and Trace" plans will necessitate between 60 million and 220 million PCR and serologic tests over the next 18 months; the more "Test-centric" plans will require billions of tests. This amounts to hundreds of thousands, or, more likely, millions of tests being performed a day. At present, we are testing well below this amount.

Changes to Medicare policy could play a central role driving more testing. The Medicare program pays providers using cost-based reimbursement. This reimbursement program aims to compensate providers for their marginal costs of production. There is also robust evidence that private payers set their prices to follow the Medicare fee schedule. As noted, there is insufficient private incentive for producers to develop tests and then build the necessary production capacity.

To stimulate more testing, we are making three recommendations. First, the federal government should set a fee schedule for COVID-19 testing that applies to all payers. The payment rate per

 $and\ https://drive.google.com/file/d/1EhUfmT6ayG3ERxX-wZUmB2wtIEOhRAmP/view.$

⁵ See the Duke/AEI plan: https://healthpolicy.duke.edu/sites/default/files/atoms/files/covid-19_surveillance_roadmap_final_0.pdf, the plan from CAP: and a plan from Johns Hopkins: https://www.centerforhealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2020/a-national-plan-to-enable-comprehensive-COVID-19-case-finding-and-contact-tracing-in-the-US.pdf. The test-centric plans include: https://paulromer.net/covid-sim-part1/

test should be increased very substantially over current levels, likely by an order of magnitude or more. Second, the federal government should fund all COVID-19 testing, including tests provided to the commercially insured. There cannot be factors, like cost sharing, that limit individuals' demand for tests. Third, the federal government should take all steps necessary to guarantee the production of the supplies (e.g. swabs, reagents, etc.) necessary to support widespread testing. As with other production problems, solving the problem of test production may require massive funding to pay for startup costs, the invocation of the Defense Production Act and/or the creation of a powerful, WWII-style federal Health Production Board.