

Mobilizing the Political Economy for COVID-19¹

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Glen Weyl²
Rajiv Sethi³



EDMOND J. SAFRA
Center for Ethics



COVID-19 threatens every aspect of global society. Addressing it requires a full mobilization of our political economy. This contrasts with a typical “endogenous” recession arising from internal failures of the financial and market system. As such, we must repurpose much of the economy, rather than simply supporting or stimulating it as in a typical downturn. This paper lays out the fundamentally different policies required for mobilization, with the hope of providing a coordinating framework that can then be modularized to further flesh out strategies across industrial sectors.

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² Microsoft Office of the Chief Technology Officer and RadicalxChange Foundation

³ Department of Economics, Barnard College, Columbia University, New York, NY

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01 Introduction

Most governmental and proposed policy responses to the COVID-19 pandemic treat it like a standard cause of a recession. The economic response is seen as following from but largely independent of the underlying shock it responds to and the goal is to “protect” the economy so that it can quickly recover from the shock. For example, economists [Emmanuel Saez and Gabriel Zucman](#) (2020) argue that the government should function as a purchaser of last resort for any industries that cannot sell into the present market, [Denmark is devoting nearly a sixth of its GDP to freeze all resources](#) in their current positions (Thompson 2020), and U.S. stimulus efforts are focusing on cash payments, bailouts, and unemployment insurance. Y

Yet as argued by Allen et al. (2020a) and [Romer and Garber](#) (2020), this approach fundamentally misunderstands the nature of the COVID-19 shock and the required response. An unimpeded pandemic and/or a prolonged national quarantine are world-war–level threats to global civilization, potentially killing several percent of the world population and/or costing as much as 100% of global GDP. Yet there is a way out of these extreme scenarios if we can rapidly mobilize the economy to produce the public health and information technology required to achieve more targeted forms of disease control than full quarantine. Under this scenario, full lockdown would end by summer (and possibly significantly before) and a transition to more targeted interventions as are taking place in Asia now would begin.

Doing so while maintaining the physical and social infrastructure that allows the economy to function, preserving critical assets, and avoiding threatening health in the process requires a massive redeployment of workers and capital. We need a publicly led mobilization of as much as 15% of our economy, not a “stimulus” package that puts 5% in cash into a system unable to serve the new needs. Even the Democratic stimulus proposal designated a mere [1% of GDP for additional public health spending](#).

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For every job rendered impossible to perform by the crisis, there are several that require immediate action to fill. Consider a few examples:

- To achieve levels of disease suppression comparable to those in Asia, we need to produce and administer roughly 5 million tests a day, more than 100 times existing capacity.
- To enable those who can work from home and who have young children to do so, their children will have to be cared for. With nearly 4 million teachers and day care workers in the U.S. and an average student-to-teacher ratio of 15:1, caring for even a third of these children will require 15 million caregivers. This problem is particularly acute given that many teachers will themselves have to become caregivers for their own children and thus will be unable to care for other families.
- To meet surge demand, hospital and Intensive Care Unit (ICU) capacity will have to increase by a factor of ten. Given that there are currently 5 million doctors and nurses in the U.S., we should require tens of millions of temporary healthcare workers.

These are just a few examples of the long list we offer below. And we clearly have the human resources to meet these demands: 58% of Americans are hourly workers, 80% live in urban areas, and nearly 80% work in service industries. These workers are needed in temporary jobs to support manufacturing, logistics, and care where shortages are becoming apparent. But without rapid reemployment, once collective quarantine and stay-at-home orders become widespread in urban areas, most urban and service workers will be unable to do their jobs, leaving almost 40% of the population without the ability to productively contribute, unemployed. Such figures rightly concern us, as these people are caught between risking the spread of infection and needing to provide for their families. Yet we should be equally concerned that we are wasting the critical talent we need to face this enemy.

Much the same goes for critical physical capital. Hotels are empty, schools vacant, stadia silent,

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stores shuttered. At the same time, medical-supply and equipment producers are desperate for space; millions live on the streets, in overcrowded prisons, or in homes that cannot accommodate sanitary care; hospitals are dangerously overcrowded; and nursing homes are too densely populated in the face of COVID-19.

In this white paper, we outline the need for four critical areas to be addressed by a mobilization plan: (1) medicine and public health; (2) information technology; (3) an economy sustaining resistance to and resilience in face of the virus; and (4) the cultural, social, and political investments required to maintain social stability and legitimacy. This plan may be contrasted with the freeze-in-place approach, most closely associated with current policy in Denmark (Allen et al., 2020). Freezing in place idle workers, empty spaces, and unused equipment at a time of such acute need would be costlier not just in narrow economic terms, but also in our ability to support and perform the most critical lifesaving functions.

Everything described below will accompany the maintenance of normal economic activity that is not directly impacted by COVID-19, including most activity in rural areas and much of the digital economy. The more quickly we mobilize, the greater fraction of standard activity can be maintained. Mobilization for transition appears feasible even by the end of April if we can muster sufficient political will. Based on the estimates above, roughly half the economy will be transitioned during the quarantine period of one to three months and probably 10% for a year after that. We should thus expect government expenditures of approximately 15% of GDP over the next 18 months and a diversion of 5-10% of GDP over the next 18 months to medical and public health interventions and away from goods and services that would be demanded in the absence of the pandemic. Thus, required government expenditures are only slightly larger than the current stimulus plans of \$2 trillion. Note, however, that every additional month of delay and failure to focus expenditures on critical public health investments

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rather than bailouts and/or cash payments will cost the economy roughly 5% of GDP. Every additional month of delay costs at least an additional \$1 trillion, probably closer to \$2 trillion. Moving faster to mobilize and focusing resources on this will dramatically reduce the total cost of this pandemic in blood and treasure.

02 Medicine and Public Health

Workers and capital can be redeployed to support medicine and public health along several dimensions: research and development, disease testing, antibody testing, medical capacity, facilities repurposing, and critical supplies.

Investment in vaccine development, treatments, and diagnostics must be increased by one to two orders of magnitude worldwide. This requires total spending at the level of current total global spending on health research, or roughly \$10 to \$20 billion over the next two years, and should include large cash prizes for successful innovations. The aim should be a regime where almost any remotely plausible path is explored and funded, conditional on reasonable financial probity. Funding to support this must come in a roughly proportional-to-income way from all major developed countries. It should be enforced by blocking those who do not contribute from priority readmission to global trade, travel, and commerce when these resume. Longer-term financial support to pay off debts incurred in this process is discussed below. Additionally large investments should be made in preparing factories to turn on a dime in producing vaccines at massive scale the moment these are available.

Testing capacity for current infection status must be brought up to the South Korean ratio of 15:1 between tests administered per day and new infections per day. As this will probably not occur until we are near the peak of infections, this will require the capacity to test 1% or so of the population per day, or several million tests per day in the U.S. However, manufacturers are confident they can scale up production to this level by the beginning of summer, and it should also be possible to put in place all the other necessary infrastructure to ensure that once available, test kits are rapidly distributed and deployed. Furthermore, recent results are encouraging about the potential of cheaper tests that can also screen for antibodies and potentially immunity. If [current promising experiments](#) prove out, it should be feasible with an aggressive surge to test nearly the entire population for immunity by the end of April,

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enabling many who are immune to return to the most critical work and thus further empowering the rest of the plan.

The strongest impediments to testing today are not manufacturing of difficult components but organizing supply chains, distribution centers, workers and the supply of less specialized equipment, such as personal protective equipment (PPE). Maximum investment should be made at maximum speed to scale up production.

ICU capacity must dramatically increase, by nearly an order of magnitude within the next 3 months to a year, rising from roughly 100,000 to roughly 300,000 beds, or greater if mobilization on other dimensions slows; total medical capacity must rise from roughly one million to roughly three million beds. Mass construction and mass repurposing of workers to temporarily work in supporting health care provision is required and was shown possible by efforts in Hubei.

Facilities (such as schools and entertainment venues) unable to operate should be massively and rapidly repurposed to provide both hospital and ICU capacity.

Dramatically increased production of other critical supplies is needed, including ventilators (at least a million are required, up from 100,000 to 200,000 available now), hundreds of millions of face masks per week, capabilities for remote temperature and if possible symptom analysis, hand sanitizer, nitrile gloves, and so on.

As testing capacity expands, it may be possible to identify subgroups or individuals or localities that are safe enough to engage in routine economic and social activity. If it is found that recovered individuals enjoy a period of immunity during which they are safe (and safe for others to be around), less stringent

03 Information Technology and Incentives for Compliance

forms of isolation become possible, and large-scale redeployment of workers starts to become feasible.

Taiwan and Singapore have already demonstrated the potential for technologies that allow (1) secure, private, community knowledge-based tracking of individuals' locations to find intersections and build maps of locations and contacts exposed; (2) high-quality statistical models to triage testing and analyze probability of infection for those not yet tested; (3) reporting of availability of critical supplies in shortage by location; (4) verifiable-to-social contacts proofs of hygienic standards and immune status; and (5) monitoring of compliance with stay-at-home orders based on maximally non-invasive algorithms checking location history. Such tools for targeting need to be adapted, built, and scaled.

To make such tools effective, universal or near-universal availability of high-speed internet connections and mobile connected devices is necessary. This should include subsidized devices and substantial public ownership of the internet backbone.

Significant public investment and possibly powers of eminent domain are needed to rapidly increase wireless capability and where possible accelerate fiber connections throughout the country to counteract loads on infrastructure from individuals working at home and increased video connection during quarantine and stay-at-home orders.

Compliance with quarantine and stay-at-home orders will depend on not only social support to those whom lockdown hits hardest, but also a combination of social and systemic monitoring. As much as possible, police power must be avoided if for no other reason than limited police capacity. Conditioning early availability immune testing and certifications on provable compliance is a natural route, as is allowing individuals to prove certified compliance to friends and family.

04 The Economy of Resistance and Resilience

As argued in an earlier [white paper \(Allen et al. 2020b\)](#), the economic impacts of COVID-19 can be usefully partitioned into two categories: composition effects and scale effects. Composition effects refer to collapses in the demand for certain goods and services even as demand for others is sharply rising, while scale effects refer to the aggregate size of the economy with respect to employment and output. These different categories of effects require different policy responses: redeployment at scale to deal with composition effects, and social support and financing to deal with scale effects. However, our overriding goal should be clear: maximize the speed and aggressiveness of compositional transitions to minimize the necessity of scaling down.

The economy both under initial lockdown and under a longer period of twelve months or so until effective vaccines and treatments are available will require rapid retraining, modification of licensure and regulation, public-private partnerships, extensive social support, and the maintenance of critical infrastructure.

In order to ensure all potential COVID-19 patients are promptly treated and thus further spread is avoided, testing, treatment and preventative measures for COVID-19 must be provided free by the government to the public, and rationing must be based on public health impact, not on ability to pay. Given that the public health sector will become an even more substantial part of the economy (it is already at 20% and could easily triple) during not just lockdown but even for a substantial time afterwards, this will lead a large section of the economy to be administered using non-market mechanisms rather than according to the price system. As during World War II, however, substantial production and contracting can remain in thoughtfully monitored private hands. Many frontline health workers will have to be directly employed by governments, possibly through a large temporary expansion of Medicare and/or Medicaid through state block grants (see below for further discussion of social support).

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Retraining such a vast pool of workers both for public employment and for many of the private needs discussed below will be well beyond the capacity and expertise of the private sector. Large scale retraining, primarily administered online to the extent possible, should be made available by the government, potentially in partnership with online education companies. Such training will have to continue and evolve over coming months as the pool of workers and necessary activities will transition dramatically as summer begins and full lockdown ends.

Given the need for dramatic, but temporary, increases in various workforces, the regulatory regime in many affected industries will have to be temporarily reworked. For example, the scope of nurses' practices will have to dramatically expand to cover many roles currently filled by doctors, and temporary workers will have to fill most roles typically covered by nurses (though specifically focused on routine COVID-19 workflows). At the same time, sanitation inspections and regulations, conducted using digital technology as much as possible, will have to be dramatically scaled up in many industries. These lessons apply to many other industries, though less extremely.

Many non-essential redeployments will require a mixed investment model of co-investment or loans to support businesses as they reshape their operations. Massive increases in delivery, sanitation, monitoring, elderly care, and other critical services will be required. Key non-essential, but critical services (such as video conferencing) will need to be free or discounted during this period and may require temporary subsidies. These investments should be offered at competitive terms but with broad liquidity, to ensure public debt accumulation is backed by financial stakes that can be called in after the crisis, avoiding potential public credit crises.

The market alone cannot provide the rapid and massive redeployment of workers and capital, in part because the risks are great and the profits small. Ventilators, for instance, cannot be sold at market

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clearing prices, allowing affluent individuals storing them privately in case of future need. Such items need to be rationed and allocated in a manner consistent with norms of equitable access to lifesaving treatments.

Masks, testing kits, sanitizers, and other goods in high demand also need to be rationed instead of being sold at market clearing prices to the highest bidders. Rationing tends to give rise to hoarding and profiteering through resale markets, so such activities must be monitored and prevented.

Protecting firms from illiquidity under these conditions will require short-term lending on a large scale so that debt can be rolled over periodically. The Federal Reserve Board has broad legal authority under Section 13(3) of the Federal Reserve Act to lend to non-bank entities under “unusual and exigent” circumstances. This authority was invoked during the global financial crisis of 2008, and again in March 2020 to channel short-term credit to businesses through the [Commercial Paper Funding Facility](#).

But lending freely may not be enough to allow many firms to remain solvent, since they face a substantial loss of revenue that may never be recouped. The recently passed stimulus legislation proposes a half trillion dollars for loans and grants to firms.

There are alternatives to cash grants that could be considered. Many hotels currently have single-digit occupancy rates, which cannot cover even a fraction of their operating expenses. Some of these properties could be leased to state or local governments to house individuals who need to be quarantined, medical and care workers, and those who cannot be accommodated by hospitals at capacity. This would serve both the function of increasing treatment capacity and providing cash flows to strapped businesses.

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Conversion of many unutilized or underutilized spaces to serve as temporary housing or medical facilities is already underway. In New York, for instance, a number of facilities, including the iconic Jacob Javits Conference Center, are [being converted to makeshift hospitals, as reported by the New York Times on March 21](#).

Airlines have allowed their customers to cancel itineraries and exchange tickets for travel vouchers that can be used flexibly for bookings over the course of the coming year. In principle, they could sell such vouchers on the open market, perhaps at a discount, to be used flexibly for travel when normal operations resume. Hotel chains could do the same to raise the funds needed to remain solvent. These companies would effectively be selling their output on forward markets to generate current revenues, but such markets would need to be supported by federal guarantees in case of bankruptcy.

If those complying with stay-at-home orders become destitute as a result, quarantine will fail. While maximum efforts should be made to provide incentives for redeployment, even those unable to redeploy must be able to pay essential bills. This outcome should be achieved through a mixture of direct financial support, potentially conditioned on signals of compliance with stay-at-home orders, and triggering of contingencies in leases and other service contracts. For the former, we should consider innovative approaches that open up new financial services possibilities to those receiving support, such as [individual accounts at the Federal Reserve \(Sethi 2017\)](#). These could be linked to commercial bank accounts or used for interpersonal transfers in much the same way as commercial banks now settle interbank claims through their accounts at the Fed. The latter will be especially useful for spaces that are now vacant, as real-time rents on these will be low and thus temporary breaking of leases will encourage redeployment to more productive uses.

To the maximum extent possible, the above programs and especially social support should be

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administered at levels of government, or even civil society, maximally close to those they serve.

Needs will vary across jurisdictions and significant scope for experimentation and learning should be allowed. Given most jurisdictions below the federal level cannot quickly or easily issue debt (in some cases, cannot do so at all), the federal government should act as a grantor of last resort and make substantial payments to local public good providers to allow continued functions and to support the administration of social support, redeployment, retraining, etc. Allowing diversity in policy will also require significant impediments to mobility across local jurisdictions, so that laxer jurisdictions do not spread infection to stricter ones.

The finances of state and local governments are already under extreme strain as revenues fall and expenditures rise. Most such governments cannot bridge the gap with new borrowing under current conditions, and will require support. The Federal Reserve has begun to [offer such support through the creation of a facility that can purchase short-term municipal debt \(Smialek 2020\)](#).

Much critical infrastructure that is currently in the hands of the private sector will face liquidity or even solvency issues as a result of quarantine orders. This includes much of the transportation, entertainment, and hospitality sectors, and more broadly the service sector as a whole. To avoid chaotic dismemberment in liquidation, assets facing these problems should be purchased, in some cases on a mandatory basis, by governments, or by investors with enough liquidity to weather the storm. Firms with substantial capital cushions to weather the storm should be allowed to do so.

05 Social and Political Investments

Democratic participation will become more important to maintain legitimacy, receive critical citizen input, and address the many anticipated failure modes of these plans. Given that broad collective quarantine will largely short-circuit many traditional means of participation in civic life, strengthening digital democracy is critical; [Taiwan's success before and during the recent episodes is an example to emulate \(Lanier and Weyl 2020\)](#). Voting by mail should also be enhanced and made available without precondition. There are large variations across states in the availability of no-excuse absentee voting and early voting, and best practices should be emulated. But all this will require substantial public investment, especially to ensure (as discussed above) the universal availability of the required connectivity.

One reason that Asian nations have been able to better contain levels of contagion is widespread (and in some cases mandated) mask use. The extent of mask use in the United States is much more limited, in part because of the meaning it conveys: those with masks are assumed to be either sick or fearful. This stigma inhibits precautionary mask use.

We need to work on substantial increases in mask production to meet the need, but in addition steps should be taken to alter the meanings associated with mask use. Public service announcements that portray mask use as a signal of civic responsibility and concern for others could play an important role here, by inducing admiration rather than contempt for those taking such precautionary measures.

Maintenance of morale in quarantine will require substantial social and cultural innovation. Such work is poorly rewarded in our present society and most such innovators rely on in-person gigs. As such, public support from remaining outlets for sustainability of such work will be critical, such as matching funds to support crowd-funding sites and partnerships with digital platforms to increase rewards to impactful content creators.

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Already weakened civil society institutions that rely heavily on in-person gatherings may be deeply wounded by these events. Matching funds for charitable contributions to help them adapt will be critical to sustaining the social fabric.

06 Conclusion

COVID-19 is the most serious challenge the world has faced since the World War II. Mobilizing to meet the challenge requires a complete dedication of social resources as we have outlined here. Yet, just as most nations' political economies left World War II more just than they entered it, we can hope that the above measures, properly executed, will help build a new solidarity underpinning a far stronger and more just political economy.

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