

September 4, 2020

Lockdowns are too blunt a weapon against COVID

James H. Stock

Although the US economy rebounded in May and June, the recovery has stagnated as Covid-19 spread across the country. This underscores [the conclusion of many economists](#) that [suppressing the virus](#) is a precondition for a robust pre-vaccine recovery.

The question — sadly, as relevant now as it was four months ago — is therefore how to suppress the virus as cost-effectively as possible. Should we resort, as [some have suggested](#), to a new round of more stringent economic lockdowns? Should we use other methods to suppress coronavirus? Or should we simply wait and let the economy adjust until a vaccine arrives?

[Recent research](#) I have been involved in on policies to counter a second US wave shows that economic lockdowns are neither necessary nor sufficient to suppress Covid-19. But the concerted use of largely non-economic interventions can suppress the virus and set the stage for the recovery of demand and employment in restaurants, travel and other high-contact sectors.

Our epidemiological-economic model of the US economy looks at different age groups to allow for variations in transmission rates and mortality. Examining many sectors allows for differences in worker-age composition, contact rates and the ability to work from home. The model distinguishes between risks of contagion at work, at home and elsewhere, such as while shopping or at school.

Using this model we simulated a wide range of interventions which vary by age, economic sector and location. One is closing non-essential businesses if infections and deaths increase — but economic lockdowns alone are a blunt, costly and only partially effective instrument of public health.

There are many less expensive measures that, when deployed together, can be highly effective. These include working from home and setting rules to make the workplace safe. Taking special steps to protect the elderly, reopening the lowest-contact economic sectors first, banning the highest-risk activities such as bars and large social gatherings, wearing masks, social distancing and enhanced testing, quarantine, and contact tracing are already familiar. If they are seriously adopted, together they can suppress the virus without resorting to a new round of economic lockdowns.

The US has done a few of these well. For example, many workers continue to work from home and employers have largely embraced measures to cut transmission in the workplace. But, in some key areas, the country has fallen short. [Some states](#) permit large gatherings and have reopened bars. Despite President Donald Trump's belated endorsement, [mask usage](#) remains lax in many states — and, because the virus spreads with interstate travel, failure to control Covid-19 in a single state impedes a national economic recovery. Most important, testing for the virus remains grossly inadequate.

Rapid screening tests need to be widely available. And because society benefits when an infected individual isolates, tests should be heavily subsidized. My colleague Michael Mina [argues persuasively](#) that [the government](#) should fast-track approval and production of cheap paper-strip antigen tests that would alert the newly infected of the need to isolate.

Screening tests need not detect every infection. Mathematically, rapid testing and isolation acts like herd immunity: by reducing the chance that a susceptible individual comes into contact with an infected one it can drive the basic reproduction or “R” number below one. Even if a testing regime pulls only a fraction of the infected out of circulation, that — along with other measures such as widespread mask usage and targeted bans of potential superspreader events — can suppress the virus, bring down deaths to very low levels and set the stage for a strong recovery.

Some might argue that the path we are on is good enough until a vaccine arrives. After all, [US new home sales](#) are at their highest point since the financial crisis, and [July retail sales](#) exceeded their pre-pandemic level. But those indicators actually reflect virus-related problems: white-collar workers looking for less dense suburban housing and consumption shifting from [services](#) to the [goods](#) that are [measured by retail sales](#).

As long as the virus circulates, activity in restaurants, airlines, hotels and other high-contact services will remain depressed. As we delay, more short-term unemployment becomes long-term, employers go bankrupt and, with waning federal fiscal support, companies must adjust to lower levels of aggregate demand. This path sets up a post-vaccine repeat of the slow recovery from the 2008 financial crisis.

Everyone is exhausted by this ordeal. Yet we still have the time and the responsibility to avoid even worse economic damage. We know what needs to be done: make wearing masks a patriotic duty; approve and provide cheap, rapid testing; invest in contact tracing and quarantine; and implement a national surveillance system, such as [wastewater testing](#), for use once the virus is suppressed. With these tools, and others, we can beat the virus and get on the road to recovery without resorting to more economic lockdowns.

Michael Mina, a Harvard assistant professor of epidemiology, also contributed