

Internalize Externalities to Flatten the Curve

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In a now-famous paper published in 1960, “The Problem of Social Cost,” Ronald Coase shows that transactions costs influence how people deal with problems that arise from property rights disputes. If those costs are too high, conflict tends to persist as the relevant parties might be unable to discover relevant solutions. As those costs fall, however, conflict dissipates as the parties face growing incentives to implement relevant solutions. Does Coase’s logic offer any relevance for our seemingly endless days of state-issued lockdowns, restrictions on large gatherings, restaurant capacity constraints, etc.? Let’s find out.

Coase’s Insight

Consider—as Coase did—that when a candy factory uses loud machines to make candy and disrupts the operation of a nearby doctor’s office, it is not clear whether a harm has been committed, let alone who caused harm. We might reasonably think the factory’s machinery is the source of harm; after all, it is the noisy machines that disrupt the doctor’s normal operations. “Not so fast,” says Coase’s logic, “harm is reciprocal.” There would be no harm but for the actions and choices of both parties. Indeed, the doctor in the real legal case (*Sturges v. Bridgman*, 1879) moved into the area knowing the candy factory was already in operation.

The essence of Coase here is that when individuals can easily interact with one another, or when transactions costs are negligible, they are more likely to discover ways to minimize the initial harm or internalize the externality. And, importantly, such discoveries make both parties better off. For example, the doctor might pay the candy maker to produce less, which lessens the noise pollution; the doctor can resume normal operations and the owner of the candy factory is compensated. A similar outcome—in terms of eliminating the externality—would also result if the owner of the factory paid the doctor to move away, or if the owner paid for the installation of some kind of noise cancellation device. Of all these potential solutions, the doctor and owner can come to an arrangement, and the initial externality goes away.

Externalities Are Problematic

One way to apply this logic to our COVID-19 troubles is to recognize the property rights people have over their choices and actions, e.g., to eat lunch with friends, to walk outside, to speak with others, to engage in peaceful gatherings, etc. Such property rights might not apply during outbreaks and epidemics of infectious diseases; that is, we might deem that such rights should be broken in these kinds of emergencies in order to limit the spread of disease.¹ Reasonable people can disagree on whether we should have such rights, but we should still consider the implications. Very few people

¹ You might argue no one *should* have a property right to behave in ways that spread infectious diseases that lead to higher rates of morbidity and mortality. If this were the case, Coase’s argument does not follow. I thank Geoffrey Lea for making this point.

have recognized these implications, and they offer novel ideas to improve present and future responses.

The initial claim is that an individual's behavior potentially spreads COVID-19, which harms others by raising the probability of infection and death. (The real issue is *by how much* a person's behavior raises those probabilities, but we can rarely answer this question definitively). In any event, we can point to examples of how these externalities arise. Indeed, most human behavior in society creates some kind of externality. These behaviors range from having conversations and engaging in intimate relations to having lunch with your teammates and shopping for wedding dresses. People also have rights to assemble, e.g., large gatherings like faculty meetings, concerts, church gatherings, and political rallies. Such rights should be exercised; but the potential externality arises as talking in close quarters entails a potential harm of spreading infectious diseases. Other kinds of externalities might include being near or living with older people, e.g., living in nursing homes. Indeed, the Virginia Department of Health reports that 90.9% of all COVID-19 deaths in Virginia are from people older than 60 (49.2% of all deaths from COVID-19 are from people older than 80; 26.2% of the deaths are from people who are between the ages of 70 and 79; and 15.5% of the deaths are from people who are between the ages of 60 and 69.) Infectious diseases like COVID-19 make such activities and situations awkward to say the least because people often find it difficult to bear the full costs of their actions.

This is a valid argument, but it ignores the Coasean logic above especially if we recognize people have legitimate claims to engage in those behaviors. Yes, people who don't wear a mask—or people who go to church, or people who have sex, or people who eat lunch, or people who talk with other people—emit negative externalities. And these externalities potentially harm others by raising the probability of infection and death. Following Coase, however, the mere potential and even presence of an externality does not necessarily mean harm is created, let alone whether a particular party should be made to alter their behavior.

The upshot of recognizing property rights—for people who engage in normal, potentially infectious behavior and for people who want to avoid infection—is that negotiation is a potential means of disease prevention. Imagine my whistling is an infectious behavior, that I have a right to whistle, and that you have a right to not be infected. There are many possible outcomes of such negotiations, if they ever took place, depending on the parties involved and the goals they valued. One outcome might be that you pay me to stop whistling. Let's say I value whistling in the amount of \$5. If you value your health more than \$5, you would be willing to pay me to stop whistling; once you pay I'll stop whistling. Alternatively, if I really wanted to keep whistling, I would be willing to pay you an amount up to \$5 so you will keep your distance. Instead of whistling, substitute taking a vaccine, social distancing, wearing a mask, opening windows, installing ventilation systems, washing your hands, etc., and the scope of voluntary preventative behavior expands.

Transactions Costs Minimize And Exacerbate The Externality Problem

Perhaps whistling—and the general argument—is fanciful, naive, or trivial, but it highlights some principles about disease prevention we ought to consider, especially as a means of comparison to other public health approaches. Dueling, legitimate property rights create incentives to negotiate and

internalize externalities. The more people can negotiate and find novel solutions to serve their ends, the more they will find innovative ways to pursue their goals and limit the spread of disease like COVID-19.

Some of the simplest ways people respond to epidemics and internalize externalities—such responses are bolstered by the expectations property rights create—is by altering their own behavior based on their perceptions of how prevalence and mortality rates change. These kinds of responses are commonplace for most of the outbreaks and epidemics we observe, e.g., wearing more condoms to prevent HIV infection and improving hygiene during the 2009-10 H1N1 epidemic.

Furthermore, people often elicit the help of others in their efforts to limit exposure, which suggests negotiation is a relevant means of prevention. People could offer payment to stay away, to wear masks, to cover their mouth, to vaccinate, to avoid crowded areas, etc. Such payments are more likely with the advent of online banking and especially applications that facilitate fast, reliable, and secure digital payments, e.g., venmo, paypal. “Stay away” apps would even offer subscribers information regarding hot spots or they could facilitate payments between interested parties. And don’t forget face-to-face communication; people have used that tool for many years. The more people learn and the more they are responsive to outbreaks and epidemics, the more they will be interested in making explicit payments to internalize externalities. Such incentives encourage innovation to discover better means of prevention and increase the control individuals have over their preferred exposure to COVID-19, among other infectious diseases.

The challenge is to learn more about when and where people face such incentives so we can better understand how those costs influence behavior and health related outcomes. People face different transactions costs as they enter and exit one social setting after another. Some people face relatively low transactions costs, which would encourage negotiations, but others face relatively high transactions costs, which indicates person-to-person negotiations are less likely. For example, we might easily expect such negotiations amongst families, close friends, regular coworkers, and perhaps small firms, but perhaps not in larger groups. In such groups, searching for a relevant person to negotiate with seems more challenging, especially if people can maintain their anonymity. We should not expect much negotiation between you and the person who preceded you at the checkout counter of the grocery store. Even if people face significant transactions costs, however, this does not mean there are no other ways to internalize externalities. While we wouldn’t expect customers to negotiate at the grocery stores, we should expect the owner of the grocery store to engage in such negotiations. The owner faces a clear financial incentive to keep customers healthy—at least healthy enough to purchase groceries—and she can employ a really neat negotiation tactic: the power of exclusion. That is, the owner of the store can restrict entry in a number of ways, e.g., “no shirt, no entry,” which might pertain to the monitoring and enforcement of public health rules. To the extent large groups, sports teams, firms, stores, and colleges impose and enforce such rules via their power of exclusion, they internalize externalities, they allow the resumption of normal activities, and they will tend to lower the spread of infectious diseases.

COVID-19 Is Not The Only Harm We Can Impose On Ourselves

A final upshot of this Coasean approach to disease prevention is that it suggests the possibility of minimizing the costs associated with spreading a disease like COVID19 *and* the costs that often arise from long periods of isolation. The latter kinds of costs are relevant because many state-level governments imposed varying degrees of lockdown orders, e.g., stay-at-home and shelter-in-place orders, which depending on the degree of enforcement, attempted to limit the spread of COVID-19. The jury is still out as to whether such policies were effective, but such policies also led to additional harms in the form of lost plans and opportunities, which range from dining restrictions and restaurant closures to lost time in the classroom and rising unemployment, in addition to higher rates of depression, suicide, alcohol and substance abuse, and physical abuse that follows long periods of isolation. While such policies might have lowered the spread of COVID-19, those policies led to additional harms that could have been avoided. Indeed, the Coasean approach gives people opportunities to consider innovative ways to pursue normal plans *and* to minimize the spread of COVID-19. Next time we should consider talking with each other, negotiating over the rights we typically cherish, and innovating to pursue our individual and shared goals.