Some thoughts on economics and policy at the time of the pandemics

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Governments all over the world have taken drastic measures to minimize health and life consequences of the coronavirus. These measures have major and dramatic economic impact. I do not claim to have earth-shattering insights, but I have been following and commenting on social media on various aspects of the crisis and the response to it, and I thought it may be of some value to share my thoughts in a somewhat organized fashion. It is a commentary on policy and economics of relevance right now and speculations about the future.

Public health

The virus is very contagious and, by all accounts, an order of magnitude more deadly than seasonal flu. At the moment, there is no vaccine and no reliable cure (although, apparently, there are promising directions). If left to propagate on its own, it would fairly quickly infect a large share of population, 70% or more by most extrapolations from its basic reproduction rate. With population mortality rate estimates of the order 2-3%, that's potentially 2% or so of the population dying. These numbers are not certain, but they help focus one's mind and make it clear that mitigation is not an aggressive overreaction, but instead it reflects actual serious consequences. Fast spread of the disease quickly leads to exceeding the capacity of health care systems, so that the mortality rate may even be higher in practice. Given that we are already at the stage of community spread, at the moment mitigation to slow the spread is the only option. Widespread mitigation measures starting from simple hygiene (washing hands), through behavioral ones (social distancing) and truly radical (strictly quarantining the whole areas) can slow the spread and reduce the magnitude of the peak so that the health care system can hopefully manage. They can also buy us time to implement widespread testing, vaccines, and treatments.

A vaccine and truly effective treatments are unlikely to be a few months away (though one can always hope). Scaling up testing capacity should be faster and, as South Korea (the one country with a serious outbreak that seems to have brought it under some control by now without draconian measures applied in China) demonstrated, widespread testing can make a massive difference and facilitate reversing the process. "Widespread" has to be truly widespread in order to identify cases early and in order to identify asymptomatic ones. On the public health side (though, of course, I'm speaking as a non-public health expert) that strikes me as a potential game-changer that can make a meaningful difference fast.

Why can't we let this thing just play out? There is the humanitarian aspect of course and consequences for the health care system. There are economic costs too. What if 2% of people die? Is preventing that worth the potentially immense economic cost? Just as a matter of perspective, note that commonly used estimates of the economic cost of life are of the order of $9 million (I'll use this as a number, you can find lower and higher ones in the literature). US GDP per capita is about $60,000. A loss of an average life is equivalent to the annual loss of output of 150 people. Scaled to the population, with 2% death rate, that's equivalent to 3 years of GDP. We can quibble about these numbers – maybe smaller, maybe larger, $9m is private value, $60k is economic market output – but that gives a sense of the order of magnitudes involved here. Even hard-headed economic approach that puts humanitarian concerns aside as an independent objective, gets you to take the potential scale of life loss here very seriously when traded off against economic consequences that are measured in non-trivial percents of GDP. What can make this calculation tilt toward discarding public health efforts is the demographic of the most severely affected population – older, with other health conditions. Using age- and productivity adjusting you can drive these numbers down, but I do not see a way of pushing them far enough to imply anything but aggressively trying to contain the epidemics and, by revealed preferences, it is not the choice that most policy makers are contemplating.

Given magnitudes of the potential loss of life and economic consequences, spending on mitigation should be the foremost priority. The hypothetical example is universal testing, that could allow to identify and isolate infected individuals. We don't have capacity for that yet, but let's just consider how much it might cost. I'll assume the cost per test of $5 (it depends on the type, but that seems to be the current ballpark). If we could scale it to the whole society, that's $1.7 billion. Double that to account for personnel and logistics, assume that we'd have to repeat it 10 times and you arrive at $34b — less than 0.2% of GDP. There are tons of problems in implementing widespread testing and building up sufficient capacity, but the costs of doing that appear orders of magnitude smaller than the potential benefits. We should be investing massive resources in that, as well as in vaccines and treatments — given the scales involved here, it is hard to think that the marginal benefit of any plausible level of spending is anything but overwhelmingly positive.

The recession

We do not have capacity to stop the spread right now absent behavioral changes. Behavioral changes involve "social distancing". Social distancing means that any activities requiring close contact with other individuals are off the table. That unfortunately means a large chunk of our service-oriented economy. Restaurants, gyms, retail stores, schools, theaters, entertainment. Then, transportation and travel, both business and individual — airlines, hotels. Many others.

What is the nature of this shock? We are used to thinking about supply and demand, but this is not a clean shock to one or the other. To be clear, there is a supply shock — early on, disruption of the international supply chain was probably best thought as that; people getting sick and not working are that; people being quarantined and unable to go to work are also that; and so is the order to shut down a business. Quarantine is also a demand shock — you can't go to a restaurant even if it was open (but it is not). While that lasts, a policy is ineffective in doing the standard Keynesian thing of boosting aggregate demand. What are you going to do, make me go to a restaurant that's shut down anyway? My marginal propensity to consume is close to zero. To be fair, there may be be a role for standard fiscal stimulus down the line when depressed demand due to unemployment, uncertainty, and depletion of savings may be restricting economic activity. Crucially though, the extent to which that is going to be necessary will depend on the extent of the slump that we will go through.

How to think about that? What we want is to hibernate the economy for a bit. The economy does not collapse on weekends and it does not collapse in Europe in August when seemingly nobody works. How is that different? What makes it different is of course that it is unexpected, widespread and nobody has planned for it. There is no insurance that covers this event and, absent planning, there is limited capacity for most to finance enforced vacation. Obviously, that is individual suffering, but how can that turn into something more than short term pain? This is where the role of various inflexible expenses starts looming large. For individuals — rent or mortgage payments, utilities. For businesses — rent, interest, any necessary maintenance, payroll, etc. The story is the same on business and individual sides: once cash flow dries out, absent being well capitalized, you are in trouble.

What makes all of this worse is that this is not just your personal trouble. Missing rent or mortgage payments affect landlords, banks or investors who hold securitized mortgages. Missing payroll or layoffs affect employees, who are then going through their own cycle. The lack of liquidity will lead to bankruptcies and evictions. A business that folds will not be around when the economy is ready to pick up steam. A worker that gets evicted may move and not be able to restart at the same place. It is these longer term spillovers from the necessary short term decline in activity that should be at the top of the policy focus. The recession will hurt because there is a real loss of output, there is just no way around that. The key question is how to minimize how much it hurts once the necessary part is over and the way to do it is to minimize the damage to the position of consumers and producers when the economy is about to restart. That means not letting too many businesses and people go bankrupt or fall behind on their obligations. That makes it clear in my mind that the focus of the policy in the short term needs to be on where the problems are: mortgages, rents, utilities, credit payments. That's true for both individuals and firms.

The damage is broad but not universal. My university employer is more or less fine. My retirement account has been hit badly, but my saving account is fine. I do not need a check. On the other hand, my gym or a restaurant on my block have just seen their income almost evaporate over night. The gym might survive, given membership fee structure. Some restaurants can get a little bit from take outs and delivery, at least today (maybe not tomorrow, depending on how containment strategy evolves). But the loss of cash flow is massive and absent an intervention, these businesses may need to shut down.

I worry that a universal check instead of more focus on targeted aid will turn out to be a very costly mistake. It is not enough for those that need it. It is completely unproductive for those that do not (I am not going to a restaurant, I can't). It is a very poorly targeted and likely ineffective measure now. There will be a time for it. Perhaps, because it will be mostly saved by those who do not need it, a check now will help when it is spent a few months from now, but it will be helping in the environment that will deteriorate more than it needs to.

There are ideas around. On the employee side, loosening criteria for receiving unemployment insurance, boosting its size, paying for furloughed workers, paid sick leave. On the consumer side, interventions targeted at delaying or paying for mortgage payments, rent, utilities. Liquidity for businesses, partially taking over their payroll obligations via unemployment or explicitly. On the tax side, delaying or forgiving taxes that can be easily adjusted – postponing income tax payments (last year's or estimated), employer side payroll, property tax obligations. Explicit short term credit to small and medium businesses. Encouraging and incentivizing credit card companies, banks, utilities, local governments to help as well. The focus is liquidity and ability to keep managing obligations, so that when economy picks up again you have everything in place to restart.

You can and should target. You do not need to target perfectly, but because the damage is concentrated targeting is possible and any targeting allows to scale help for those that need it the most. It is not that difficult to target here. We know where the initial damage is occurring. It is happening in particular places where you have lock-down orders. It is happening disproportionately in service, food industries, transportation. You can target intervention to those businesses and their employees. Everybody in the country getting $1000 check will not save the restaurant on my block.

I do draw a line between small/medium businesses and large companies. There may be some good reasons to directly intervene in the case of large ones; the Fed policy already helps with their liquidity. In general though, large firms have access to equity and credit markets. Stabilizing those is important and some degree of intervention to ease the damage from lost cash flow for larger businesses in particular industries may be warranted. The problem is much bigger for businesses that do not have the same access to credit market and that cannot realistically raise outside equity — small and medium ones. In particular, the point is to address problems in places where market imperfection exist (credit constraints, lack of insurance), but not go overboard in trying to save businesses that may not be viable down the line (airlines as a sector, if the extent of travel will decline in the future). We should leave what we can for markets to resolve.

I have ignored the fiscal cost of all of it. That's intentional. By all accounts, the US (and many other governments) still have fiscal space and this is the time to spend. This is a true exogenous economic shock. There is only one party big enough that can mitigate it. You do it by borrowing from the future taxpayers, let's just remember that this is why you should leave fiscal slack in good times. If it prevents deterioration that does not need to happen, that is a good investment.

Once mitigation is under control and life starts coming back to normal, we will ideally have a swift recovery. That is the whole point of the focus on liquidity, survival of businesses and not letting consumer financial position deteriorate. If we manage to do that, then we will perhaps need a standard fiscal stimulus to jump start the economy. We may not even need that, depending on how much uncertainty and lack of confidence transpires, but there will be the time to discuss it.

This essay was originally written on March 19 and the world moves fast right now — as of today (March 30th), the massive \$2 trillion CARES bill has been already signed into law. This fairly quick reaction is a good sign, although the bill itself is a mixed bag. The "stimulus" part, mainly broadly targeted checks, makes little sense right now for a bill that is supposed to support people staying at home. The effectiveness of the \$500 billion "slush fund" will depend on how it is used and there are reasons to worry about its discretionary aspects. Funding and relaxing rules for unemployment insurance, tax and loan deferrals, payroll assistance, small business loans and grants, are moves in the right direction (even if details and implementation are issues). One may worry that there is too much money put into things of questionable effectiveness at the expense of more targeted ones focused on preventing deep economic distress. I think the likelihood that we will need another round is high.

Longer term

This is where things can get interesting and perhaps even, even if it is hard to imagine it now, fun.

First, I am still optimistic that it is not going to be a depression, though that will depend on how long it all lasts and how policy response looks like. Hurricanes and earthquakes are devastating, but they don't lead to depressions. You can rebuild from the damage, especially if you have insurance. This is a bit like that if it does not last too long and if government policy substitutes for missing insurance. There will be some human capital and financial capital damage, but if it is partially compensated where necessary at the expense of future taxpayers, it need not be devastating.

Second, I am looking forward to seeing how we will adapt in the short-, medium- and long-term. I have already seen some short-term adaptation. Restaurants, even high-end ones, switching to take out and delivery. Fresh bagels in my New York City grocery store are now individually pre-wrapped to reduce the risk of contamination by other customers. Everybody has been flocking en masse to video-conferencing, online teaching. My physical/sport therapist offers training sessions online. I've seen virtual pubs and happy hours pop up.

I expect much more of that in the medium term, as we learn to live with containing the epidemics, before we fully address it. Remote work and communication will be one way. We will see more people in masks and masks that are easier to use, and that will serve as a fashion statement (true already and definitely true elsewhere). We dress warm in winter, putting on a mask (assuming experts won't fully dissuade us from it), bumping elbows and bowing instead of shaking hands, washing hands and using sanitizer more often are just adaptations that we can learn to treat as normal. We may see other innovations – UV light can kill flu viruses, can we have each plate in a restaurant go through a cheap UV device for 30 seconds before being served? Can we have technology like that at home? What other forms of remote services and entertainment can we envision? Some are ripe for it – virtual appointments of many types or watching live shows from the comfort of your own home are examples.

In the longer term we will have slower, but important changes. Clearly, this event raises appreciation for sick leave. There will be an incentive for employers to adapt it voluntarily in some context (fast food, restaurants) with customers' renewed attention to the risks, but it will probably take policy to make it stick. My personal view on this that solutions that involve portable private accounts or shift the burden away from labor costs are preferable to mandates on employers, but there are many solutions elsewhere to look into. Looking closely into mistakes of CDC and FDA in preparation and roll-out of testing and drawing lessons from that about organization, planning, and regulation of private parties will be important.

More excitedly, the economy will adjust. We will fly less. Telecommuting has been slowly trending, but with this event as a coordinated push to have many more people do it, we may start seeing growing appreciation of its advantages. Part of the fixed cost of making this switch will be paid now, these investments done in a coordinated fashion will likely make it stick. Remote work means less commuting, less driving, more time spent at home. Work from home is not always easy, you need to have the right technology and adapt the environment to make it productive, you need to find solutions to have kids not intrude, you need to organize your time properly. When buying the next home, people will think more about things like this and we'll see a drift of our living, work, and commuting arrangements responding to it.

The impact on public transportation is one thing that bothers me — you can imagine reduced willingness to use it, though you can also imagine reduced commuting in general that would reduce the strain on the existing infrastructure. Alternative modes of transportation — bikes, e-bikes, scooters are potential winners, with perhaps renewed openness to having infrastructure to support it.

I'm optimistic about the impacts in the longer term. We just need to make sure that the necessary recession is as short as possible through public health response and that the unnecessary recession in the aftermath is not there by freezing and preserving as much of the economic fabric as we can right now.