

The Socio-economic Impact of COVID-19 on the Economy

Jacob Kaindoh

The World has been gripped by a pandemic over the first half of 2020. It was identified as a new coronavirus (severe acute respiratory syndrome coronavirus 2), and later named as Coronavirus Disease-19 or COVID-19. While COVID-19 originated in the city of Wuhan in the Hubei province of China, it has spread rapidly across the world, resulting in a human tragedy and tremendous economic damage. Given the rapid spread of COVID-19, countries across the World have adopted several public health measures intended to prevent its spread. However, these public health measures, has huge socio-economic impacts on vulnerable families in a developing country like Sierra Leone. For instance, lost income due to an outbreak can translate to spikes in poverty, missed meals for children, and reduced access to healthcare far beyond COVID-19. Therefore, policymakers should implement both macro and micro economic policies with or without the severity of the outbreak to aid economic planning and avoid spillover shocks.

Keywords: Coronavirus Disease, COVID-19, economic policies, economic planning, socio-economic

INTRODUCTION

The coronavirus (COVID-19) disease is an outbreak of international concern, spreading widely from the first cases in China to now being declared a global pandemic by the World Health Organization. Governments, organizations, and individuals are adopting structured and precautionary actions to prevent and delay the spread of the infection, for which there is no current vaccine. Actions ranging from flight cancellation, businesses asking workers to stay home, and financial markets realizing exogenous shocks, the global health crisis becomes a global economic crisis. In any health crisis, the utmost concern is the health of those affected. However, there are long-term effects that have economic ramifications even when a single case of the pandemic is not recorded in a country. Before we discuss these ramifications, let's first look at the figures to date. The World Health Organization (WHO) confirms, at the time of writing this article over 200 countries affected with more than 800,026 cases and more than 38,748 deaths. It could be argued from a health perspective that a recovery rate of over 21 percent point does not seem to be deadly. However, the death rate could be far beyond the actual death figures during the pandemic.

Given the fact that I am not an epidemiologist neither an expert in infectious diseases, I, therefore, sidestep the health consequences and argue on the socio-economic impacts on the wellbeing of families and communities. For vulnerable families in developing countries like ours, lost income due to an outbreak can translate to spikes in poverty, missed meals for children, and reduced access to healthcare far beyond COVID-19. While the spread of the virus in developed countries is posing threat to health systems, confirmed cases from Africa, and in many other low- and middle-income countries mean that many of the economic impacts may affect the world's most vulnerable populations.

ASSESSING THE ECONOMIC IMPACT OF COVID-19

A pandemic is like a supply shock because it mostly leads to shutting down of economies and only essential activities are given great attention. The goal during such times is to mimic the normal functioning economy as much as possible. The task here should be, to get people attached to work. Therefore, policymakers should seek to amend an aggregate demand doom loop. Let me explain the concept of an aggregate demand doom loop. Put simply, when you shut down an economy (as would be evident in the case of Sierra Leone) in a pandemic, you need to replace private business demand. The real concern will be the small and midsize firms who have to turn off a switch and just not operate for weeks, whatever it is, restructuring or not, that's a cataclysmic event. The health part is unavoidable. What's avoidable is the demand doom loop, and to do that you'd have to fill in private demand.

Our current macro-economic policies in response to the pandemic will certainly not solve the private demand. This of course will only assist large corporations leaving SMEs and their employees in the "dark space". The following are the announced policies:

1. Lower the Monetary Policy Rate by 150 basis points from 16.5 percent to 15 percent.
2. Create a Le500 Billion Special Credit Facility to Finance the Production, Procurement, and Distribution of Essential Goods and Services.
3. Support to the Private Sector for the Importation of Essential Commodities.

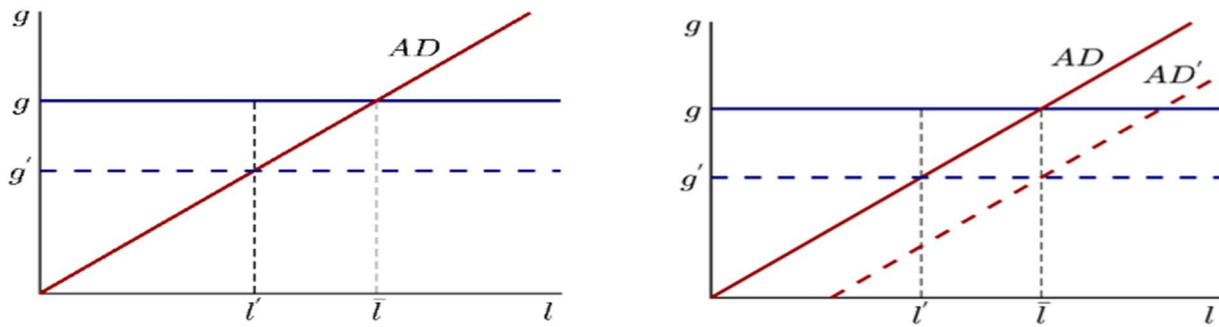
Considering our business and economic landscape, it doesn't mean lowering monetary policy or providing special credit facilities to large corporations is a one size fit all, though I have nothing against that. It means doing something for SME businesses. If I were doing it, it's replacing a significant fraction of revenue for small and midsize firms, the small-business owners. The plan should be to replace 80% of a business's revenue loss for as long as the pandemic lasts. The simple business model should be: firms go to the bank—not a new government entity—and get a loan. It would be guaranteed by the government, and that loan would be forgiven or re-paid without interest at the end of the pandemic or an agreed period provided they have kept their employees in place. So, you're keeping your employees, the relationships, and the business network in place. And when the lights come back on and the pandemic is over, you're ready. If we don't do this, we will have mass layoffs with unemployment surge even beyond the pandemic. The reason being that the SMEs are the ones with poor balance sheets and no access to credit coupled with the fact that they are the ones laying off. The only way to do this is, is to fill-up the aggregate demand or give them money. If we get policy right, we will experience what economists would call a V-shaped recession and recovery. Otherwise, in a fragile economy like ours, we would be in trouble in the long run.

THE POTENTIAL IMPACT OF CORONAVIRUS ON AGGREGATE DEMAND

Let's discuss the impact of the coronavirus on the aggregate demand mention earlier from a stripped-down version of the standard New Keynesian model (Gali 2009). As in the Keynesian tradition, employment and output are determined by aggregate demand. In turn, aggregate demand depends positively on productivity growth. The reason for this is that faster productivity growth boosts agents' expectations of future income, inducing them to spend more in the present (Lorenzoni 2009). This effect gives rise to a positive relationship between productivity growth (g) and employment (l), illustrated by the AD curve in Figure 1.

Imagine that the Sierra Leone economy is initially at full employment (point (g, \bar{l})). Then suppose that the coronavirus epidemic causes a persistent drop in productivity growth (already impacting the hospitality industry), from g to g' . As illustrated by the left panel of Figure 1, the result is lower demand and the emergence of involuntary unemployment ($l < \bar{l}$). The lesson is that the coronavirus epidemic, through its negative impact on agents' expectations of future productivity growth, might induce a demand-driven recession.

FIGURE 1
IMPACT OF CORONAVIRUS ON AGGREGATE DEMAND



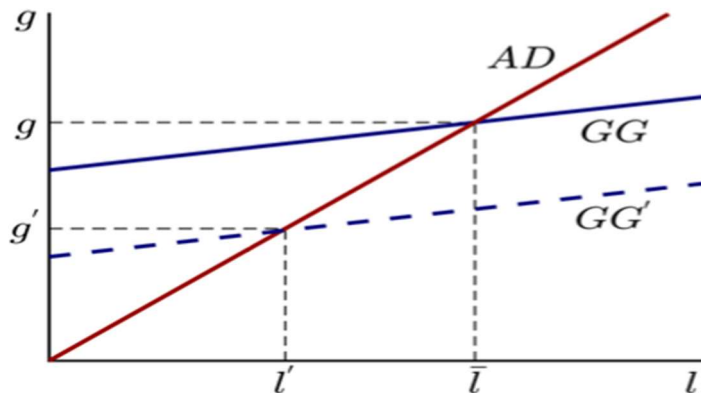
Note: Employment on horizontal axis; productivity growth on vertical axis

Now suppose that the central bank reacts by lowering the policy rate. This intervention sustains aggregate demand, by inducing agents to increase borrowing and spending. Graphically, this corresponds to a rightward shift of the AD curve to AD' . If the monetary stimulus is strong enough, full employment is restored, as illustrated by the right panel of Figure 1. The model thus lends support to the idea that central banks might need to respond to the COVID-19 outbreak by easing monetary policy. Of course, this policy might conflict with other macro-economic or financial policies which does not form part of my argument. This illustration proports my argument that monetary response must twinkle down to “bread and butter” issues as explained above.

THE SUPPLY-DEMAND DOOM LOOP

In reality, productivity growth is at least in part driven by firms’ investment. In turn, investment decisions depend on aggregate demand – when demand is strong, the return from investment tends to be high; weak aggregate demand, conversely, depresses firms’ incentives to invest. This effect gives rise to a positive relationship between productivity growth and aggregate demand, captured by the GG curve in Figure 2. The equilibrium is now determined by the intersection of two upward-sloping curves. This signals the presence of amplification effects.

FIGURE 2
THE SUPPLY-DEMAND DOOM LOOP



Let's again assume that the coronavirus spread generates a persistent negative supply shock, captured by a downward shift of the GG curve to GG' . What is interesting, is that now a supply-demand doom loop

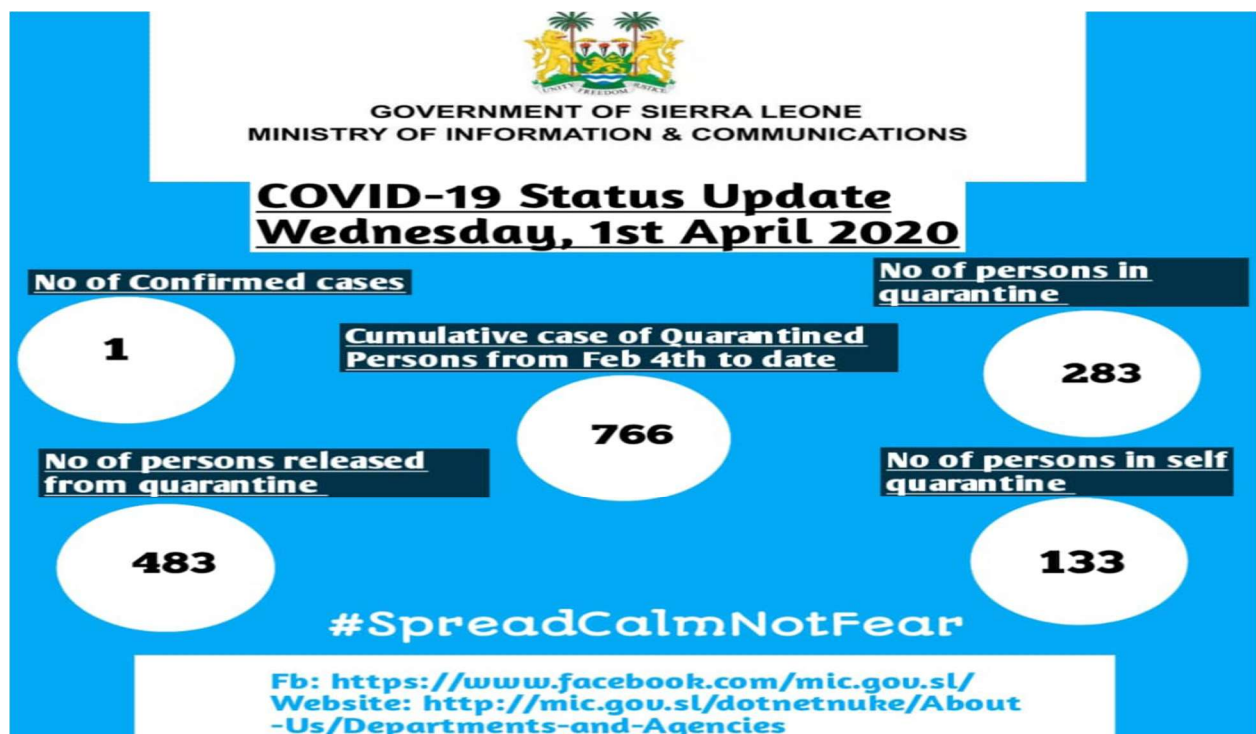
takes place. As before, the initial negative supply shock depresses aggregate demand. But now, lower demand induces firms to cut back on their investment, which generates an endogenous drop in productivity growth. Lower productivity growth, in turn, causes a further cut in demand, which again lowers productivity growth. This vicious spiral, or supply-demand doom loop, amplifies the impact of the initial supply shock on employment and productivity growth. It is agreed that monetary expansions have a multiplier effect on demand and employment. I am not of the opinion that is wrong but its economic path through which the monetary easing can reverse the supply-demand doom loop.

Now, monetary expansions have a multiplier effect on demand and employment. Suppose that the central bank eases monetary policy to increase aggregate demand. Higher demand, in turn, induces firms to increase investment. This sustains consumers' expectations of future income, leading to a further rise in demand, and so on. Monetary easing can thus reverse the supply-demand doom loop.

THE SIERRA LEONE SITUATION

Albeit all the above economic analysis applies to Sierra Leone, it is evident that the current administration in Sierra Leone has implemented proactive measures to possibly contain the coronavirus. However, as argued, there has to be an equilibrium between the health and economic measure is taken. The COVID-19 status for Sierra Leone is captured in figure 3.

**FIGURE 3
THE COUNTRY'S COVID-19 STATUS**



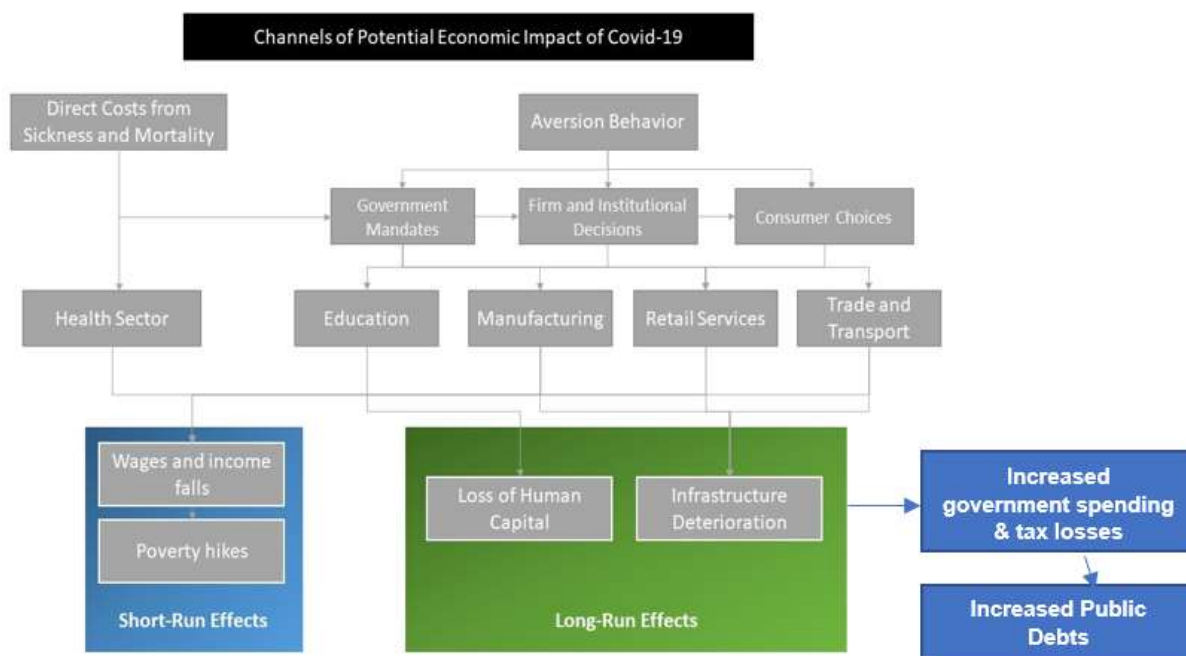
Source: Sierra Leone's Ministry of Information and Communication

Most importantly, beyond the human tragedy, there is a direct economic impact from lives lost in any outbreak. Although the cost of "lost souls" cannot be estimated, families and loved ones lose the earned income and their in-kind contributions to household income. This, in turn, has a multiplier effect on the economy. In this perspective, Let's discuss both the pandemic and economic perspectives as curves.

The first is the pandemic itself. Think of an infection curve with the first and second derivatives. The objective is to push the infection curve downwards as fast as possible. The problem is that another curve, the economic cost curve becomes steeper. The flatter the infection curves the steeper the economic cost, that's the trade-off. Therefore, it is not wise to act on arbitrary dates to get people back to productive work. We need data on infection rates, recovering rates, tracing, testing, etc. I want to make an economic submission here. The current data provided above is not statistically informative at the moment in my view because the denominator isn't clear. The figures are based on those quarantined. We need to base the denominator on testing and a move to random testing during the proposed lockdown will be wise.

Next, we turn our discourse on the channels of economic impact expected from COVID-19. Figure 4 below illustrates a summary of the channels.

FIGURE 4
BROAD CHANNELS OF SHORT-TERM ECONOMIC IMPACT OF THE PANDEMIC



Source: Author's construction, adapted from World Bank 2014.

Most of the economic impact of the virus will be—as we are already seeing—from “aversion behavior,” the actions people take to avoid catching the virus (which can, it should be noted, be a logical and proportional response). As depicted in the figure above, this aversion behavior comes from three sources:

1. Governments impose bans on certain types of activities, as when the government of Sierra Leone orders border lockdowns or social distancing discourages economic gathering.
2. Firms and institutions (including schools and private companies) take proactive measures to avoid infection. Business closures—whether through government bans or business decisions—result in lost wages for workers in many cases, especially in the informal economy where there is no paid leave.
3. Individuals reduce trips to the market, travel, going out, and other social activities.

These actions besides recording a surge in actual cases, affect all sectors of the economy—the health sector, manufacturing, retail, and other services, trade and transportation, education, and others with or without an actual outbreak. These, in turn, translate into reduced income both through the supply side

(reduced production drives up prices for consumers) and the demand side (reduced demand from consumers hurts business owners and their employees).

These short-term economic impacts can translate into reductions in long-term growth. As the health sector soaks up more resources and as people reduce social activities, the country invests less in physical infrastructure. As schools close, students lose opportunities to learn (hopefully briefly) but more vulnerable students may not return to the education system in the event of prolonged periods, translating to lower long-term earning trajectories for them and their families, and reduced overall human capital for the country.

WHAT WE KNOW SO FAR—AND WHAT TO EXPECT

Economic estimates of the likely national impact may vary dramatically, with a massive loss in output. In this case, the service industry is most likely to suffer the greatest loss.

Here's a roundup of analysis of the actual and potential economic impacts of the crisis so far:

- The occupancy rate for both international and local hotels are as low as 0%. Based on our estimate occupancy during peak period ranges between 60%-65% for a 200 rooms facility. To say the least, tourism is at its slump.
- One international hotel with a staff pool of 205 asked 141 employees to stay home with paid leave. This seems reasonable as long as employees stay at work as argued before.
- Another hotel with a staff pool of 90, actually terminated 45 employees while other hotels asked staff to run on half salary.

This resonates with the fact that our economic package should keep employees at work.

- The shock on the water transport sector is massive. Based on an interview with senior personnel in one of the major transport providers, the industry has three peak days weekly recording on average of 400 passengers per service provider. Based on our estimate, the average revenue loss per week is \$16,000.
- Revenue will be plummet in other sectors of the economy giving rise to “stressed balance sheets”. This will give rise to a problem of “twin balance sheets”.
- Increase public debts to cushion the exogenous shock and maintain employment levels.

WHAT SHOULD WE DO TO MINIMIZE COVID-19'S ECONOMIC IMPACT?

These three actions should be implemented with or without the severity of the outbreak to aid economic planning.

1. **Contain the pandemic.** Containing an outbreak requires a viable plan to defeat the outbreak. As long as the outbreak is actively spreading, many aversion behaviors may well be rational and wise. Containing the disease is the first step to mitigating not only the health impacts but also the economic impacts. Currently, there is a proposed lockdown from the 5th – 7th of April 2020.
2. **Strengthen the safety net.** The most vulnerable households are those most likely to be affected economically. Low-wage workers are often those most likely to lose their jobs if they miss work due to an extended illness. They are often the least able to work remotely to avoid contracting the virus. And they are the least likely to have savings to survive an economic downturn. Making sure there is an economic safety net is key for this class. Sadly, to say, whether this class is part of the financial policy is yet to be determined. On the other end of the spectrum, health safety nets are expected to fully implemented. Extensive tracing and testing should be executed within this lockdown period if we are to get the virus under control.
3. **Measure the impact.** Systematic data on which populations are experiencing the greatest hardships and which industries are failing is essential to assisting. Building on the sample frames (Research during the Ebola outbreak) from existing surveys—to gather just-in-time information on the impacts of both ill-health and aversion behavior on households and

enterprises across the countries. Even as we monitor the health situation across the country, monitoring the economic situation will aid economic planning.

REFERENCES

- Benigno, G., & Fornaro, L. (2018). Stagnation traps. *Review of Economic Studies*, 85(3) 1425-1470.
- Fornaro, L., & Wolf, M. (2020). *Covid-19 Coronavirus and Macroeconomic Policy: Some Analytical Notes*. manuscript.
- Gali, J. (2009). *Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework*. Princeton University Press.
- Lorenzoni, G. (2009). A theory of demand shocks. *American Economic Review*, 99(5), 2050-84.
- OECD. (2020, March). *Economic Outlook, Interim Report*.
- World Bank Group. (2014). *The Economic Impact of the 2014 Ebola Epidemic: Short- and Medium-Term Estimates for West Africa*. Washington, DC: World Bank. Retrieved from <https://openknowledge.worldbank.org/handle/10986/20592> License: CC BY 3.0 IGO