

An Analysis of the Impact of the Epidemic on the Economy

Yuxuan, Wang^{1,a,*}

¹High School Attached to Northeast Normal School International Division, Changchun, Jilin province, 106, China

a. lucywang131668@qq.com

*corresponding author

Abstract: COVID-19 has been a very serious problem worldwide, not only causing many deaths but also causing a recession in economic growth and the stable development of society. Therefore, based on existing literature and statistical data, the author analyzed the impact of the epidemic on the economy and the corresponding response measures of enterprises and governments in this situation. This article is divided into two parts. One part elaborates on the isolation and regulatory issues of economics during the Great Depression from both macro and micro perspectives, while the other part explains some solutions from both micro and macro perspectives. In general, COVID-19 has caused many negative factors threatening economic life, such as job opportunities and supply reductions. It has had a certain impact on both agriculture and tourism. Fortunately, the government has taken many measures, such as adopting policies from both macro and micro perspectives. Although COVID-19 contains many negative factors, such as health threats, it also has a positive side, such as promoting technological progress and innovation.

Keywords: COVID-19, economy, agriculture, tourism, fiscal policy

1. Introduction

Economic conditions seem to be a really important factor that affects COVID-19 across countries and people. Therefore, more and more experts would like to conduct research related to these fields. Nowadays, many people have completed a lot of data collection on these aspects, such as the unemployment rate and export rate, and give really clear solutions and interpretations of each phenomenon. Take the UCR news article as an example. This article gives a clear structure to the problem that COVID-19 has caused. 22 million people in America lost their jobs in four weeks [1]. In addition, the article analyzes the consumer side, which contains less confidence. For the solution, it illustrates some methods, both micro and macro, which included giving the subsidy of around \$2 trillion allowed by the US National Congress to individuals and small businesses. The stimulus was to stay away from the recession. For the macro solution, it gives a specific method for fiscal investment that the government provides with some physical investment. The article from UCR has similar aspects and structure as this article. and they all included the economic side of the issue that was affected by COVID-19. However, there are some differences that appear between these two articles. The first is a UCR news analysis of one country's situation. Second, the article is more willing to give a solution based on what the national government will provide instead of giving detailed information about each solution.

However, this research may be a little lacking for several reasons. The first one was that the people who did this research did not analyze the data with the situation it represents in the text; for example, most of them just state the statement without analyzing and explaining it properly to people who are not really familiar with this topic. In addition, some of them do not list the solutions very specifically. In addition, the solutions were more focused on the knowledge side, both micro and macro. This search field has had a really significant impact on society. The first reason is that it could become a really good forecasting method for people to predict the economy in a similar situation. For example, people can save money or do other prevention activities during or before this period. In addition, for the students, this topic could help them to think more deeply based on the knowledge of economics that they learned in school. Helping students study better for further economic learning, which lays a solid foundation for keeping steady memories of some of the ideas.

2. Introduction of COVID 19

Corona Virus Disease 2019, also known as COVID 19, It is a disease infected by the novel coronavirus and transmitted by saliva. Of course, it changed people's lives; people need to reduce going outside, and diagnosed patients also need to be quarantined at home, which hinders their own travel. This virus has caused approximately 20 million deaths and shattered countless families. It can be said that the biggest disaster in human history has occurred in recent years. In 2020, most of the economy experienced a shrinking or recession that largely decreased the people's quality of life, such as an increase in the unemployment rate, a decrease in the tourism industry, and restrictions on exports, which caused the hunger problem. The unemployment rate significantly grew to a certain unbelievable number of around 114 million due to those workers who lost their jobs in the span and the sharp decline of tourism as an important part of their GDP and other aspects of the economy [2].

3. Economic Affected by Pandemic

3.1. Analyzing from a Macro Perspective

The biggest impact of epidemics on the agricultural industry is labor, which can lead to labor shortages. Most laborers were quarantined at home. Productivity may decrease, which shifts the LRAS (long-run aggregate supply curve) curve to the left. It will lead to an economic recession. Because the control of the epidemic in different countries is basically concentrated on agricultural products, more than 20 countries have implemented restrictions in this regard. The majority of agricultural products are wheat and rice. It has caused huge problems for countries that are not good at the primary industry, such as Africa. According to the data provided on the internet, there will be 828 million people facing hunger in 2021 [3].

The tourism industry has also become a top priority issue that the government needs to address, especially in countries where the tourism industry accounts for over half of the country's GDP, such as Thailand. Thailand has always been famous for its tourism industry, which attracts thousands of tourists each year. Unfortunately, due to the regulations, international tourists have almost stopped entering since March 2020 [4]. Resulting in many different outcomes, the GDP of Thailand has declined by 11–12% in 2020 [5]. It led to huge unemployment, mostly related to service and tourism, estimated at 1.45 million workers [6]. It could drive the country into bad situations, such as inequality in income distribution, and cause some social problems, such as robbery. Because of the downward trend in economic growth, people had less confidence in the future and would have less consumption, which shifted the AD (aggregate demand) curve to the left in both Keynesian and new classical types of graphs.

3.2. Analyzing from a Micro Perspective

First of all, it is because of the implementation of the lockdown policy. The local market may not have been threatened by the foreign enterprise. There will be a phenomenon of monopoly. The enterprise may increase their price to ensure that they can gain a profit during the economic recession. The problem of supply and demand occurred. Take toilet paper as an example. Toilet paper is something we see every day that is nothing but ordinary. While, during the pandemic, the demand for toilet paper has grown dramatically by reason of regulation, which makes people really panic and start stocking up heavily, as mentioned earlier, productivity has significantly decreased due to employees being isolated from home. Productivity may reduce, so people immediately consumed all the products that were locked as stocks. The epidemic has had varying degrees of impact on different microindividuals. During the period of the recession, many US businesses were bankrupt. Based on the data provided, it said about 1 in 6 companies were closed, and most of them were occupied by the situation faced by small and micro enterprises whose main business is related to the real estate industry and restaurants [7]. The employee who is working under flexible compensation (a type of financial reward that is used to encourage workers to work harder) cannot get as many rewards as before. Due to the outbreak of the epidemic, people have become forced to work online, and efficiency has not been as high as before. Based on the issues analyzed above, the rest of the article is related to solutions.

4. Solutions

4.1. Method from a Macro Policies

To reverse this situation, the common solution would be a variety of policies on the macro side. It was separated into two policies. The first policy is called fiscal policy, in which the government uses taxes and spending as tools to adjust the economic situation. Generally speaking, in poor economic conditions, governments usually reduce their tax revenue and increase government spending. The government may provide subsidies to certain goods or infrastructure (infant industrial), which could also improve their efficiency and productivity. Which could shift AD to the right and achieve economic growth in the short term. In this method, the government may have a clear target, which could be a certain industry such as agriculture. The issue of unemployment and the problems of food security all around the world. The second is monetary policy, which is used to restructure the amount of money supply. When more money is put into the market, it could affect the setting of interest rates. In times of recession, the government usually chooses expansionary monetary policies that increase the money supply (the amount of money that circulates in the market) and decrease the interest rate. The people and businesses would gain more confidence, which would make them willing and able to buy more goods and services. In addition, the real GDP of a country may grow as AD shifts to the right (Figure 1). Fiscal policies should be better adopted by the government after the COVID-19 thing happened. The important point is that it could easily drive the economy out of recession more effectively. To be more specific to a particular situation. We can take a bank or a business as an example. The Bank of Canada is the central bank of Canada. When the recession occurred, the government adopted a method that was a lower 0.25 percent interest rate and purchased bonds [8]. To make sure that they are able to withstand the impact of this virus.

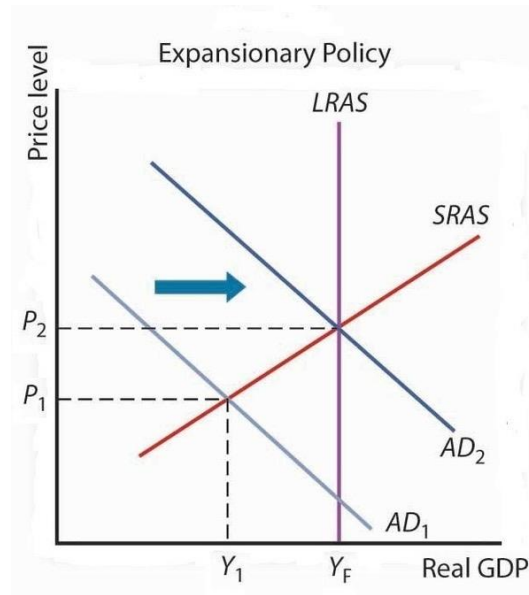


Figure 1: The New classical graph [9].

4.2. Method from Micro Policies

From the micro side, governments are more likely to use price ceilings (a maximum price set by the government that is above the equilibrium point) and price floors (a minimum price set by the government that is below the equilibrium point) to help the consumer or producer. Especially because the phenomenon of market monopoly (in the agriculture market) occurs. The government could use a price ceiling to overcome this problem. As we see in Figure 2, it represents a graph of the price ceiling. In which people could buy it at a lower price; however, some people could not buy it due to the shortage. It will attract other companies to come and sell things. The price of industrial products will be repriced again, and the allocation of resources will be more efficient than before.

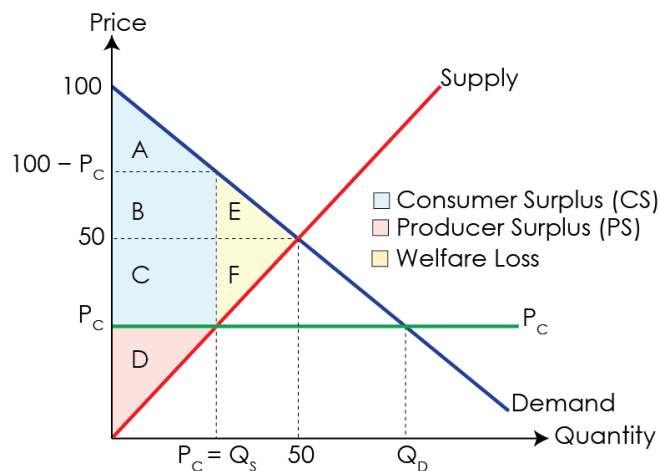


Figure 2: The graph of price ceiling [10].

5. Conclusion

Overall, COVID-19 caused a lot of negative factors that threatened our lives. For example, a lot of people died because of this, and it increased the rate of poverty. Although COVID-19 had so many negative effects, for example, the problem of work opportunities and a lack of supply, Fortunately,

the government had imposed a lot of methods, such as policy, that could be used both macro and micro. Although COVID-19 contains a lot of negative aspects, like health threats, it also has a positive side. Enhance the progress and innovation of technology. Online education and office work may bring people really negative emotions, while some industries developed during this period of time, such as make-up or TikTok dancing. Do not forget that when the government spends money on technology, it could shift the LRAS to the right of the classical graph, which could help the countries achieve long-term growth. The current research is mainly based on the results of literature and data, and future researchers will combine specific economic models to quantitatively analyze the specific impact of the epidemic on a certain perspective of the economy.

Acknowledgment

First of all, I would want to express my sincere gratitude to my instructors, professors, and other students from the online courses who have helped me immensely throughout the entire process of preparing this thesis. I also want to thank my parents and all of my friends for their help and support. Without all of their insightful advice and exemplary politeness, I could not have finished my thesis as successfully as I did, and I am grateful for the chance to delve even further into the economics subjects.

References

- [1] "This Is How Our Economy Can Survive the Pandemic." 2020. News, news.ucr.edu/articles/2020/04/22/how-our-economy-can-survive-pandemic.
- [2] Richter, Felix. 2021. "COVID-19 Has Caused a Huge Amount of Lost Working Hours." *World Economic Forum*, *World Economic Forum*, 4 Feb. 2021, www.weforum.org/agenda/2021/02/covid-employment-global-job-loss/.
- [3] World Health Organization. 2021. "UN Report: Global Hunger Numbers Rose to as Many as 828 Million in 2021." *World Health Organization*, 6 July 2022, www.who.int/news/item/06-07-2022-un-report--global-hunger-numbers-rose-to-as-many-as-828-million-in-2021.
- [4] Desarrollo, B. A. (2020). *COVID-19 Active Response and Expenditure Support Program: Report and Recommendation of the President*. Recuperado de: <https://www.adb.org/sites/default/files/linked-documents/54195-001-ssa.pdf>.
- [5] Schedneck, Brooke. "The Pandemic Has Slowed Tourism to Thailand's Buddhist Temples, but the Impact Is More than Economic." *The Conversation*, 3 June 2021, theconversation.com/the-pandemic-has-slowed-tourism-to-thailands-buddhist-temples-but-the-impact-is-more-than-economic-160673.
- [6] Wappass. 2023. [baidu.com, baijiahao.baidu.com/s?id=1697282725940141606&wfr=spider&for=pc](https://www.baidu.com/baijiahao/baidu.com/s?id=1697282725940141606&wfr=spider&for=pc). Accessed 26 July 2023.
- [7] Remillard, Mark. 2021. "COVID-19 Pandemic Exposes New Challenges for Restaurant Industry." *ABC News*, 6 Sept. 2021, abcnews.go.com/US/covid-19-pandemic-exposes-challenges-restaurant-industry/story?id=79852137.
- [8] Study.com, 2023, homework.study.com/explanation/what-price-ceiling-maximizes-consumer-surplus-given-that-qd-100-p-and-qs-p.html. Accessed 26 July 2023
- [9] Pros and Cons of Expansionary Monetary Policy. *Expansionary Fiscal Policy: Definition, Examples*. 2019-01-21." *Webstreaming.com.br*, webstreaming.com.br/pros-and-cons-of-expansionary-monetary-policy.html. Accessed 26 July 2023.
- [10] Study.com, 2023, homework.study.com/explanation/what-price-ceiling-maximizes-consumer-surplus-given-that-qd-100-p-and-qs-p.html. Accessed 26 July 2023