A Solution to the U.S. Economic Recession under the COVID 19 Pandemic Based on Keynesian Theory and Austrian Economics

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Abstract—The COVID 19 pandemic has had a serious impact on the US economy by warranting policies of lockdown and social distancing that prevent businesses from making profits. This could be one of the reasons lead a recession in the US economy. Under this situation, this paper made a study on how the US government should address its pandemic-induced economic downturn. By analyzing the current economic situation of the United States under the influence of the COVID 19 Pandemic and investigating the existing response measures of the US government and combining the two economic theories of Keynesian and Austrian economics to compare, the paper draws a feasible solution from different economic and social disputes. This paper proposes the combined use of fiscal policies, specifically in increased government spending and decrease tax rate to give information to the entrepreneurs of the current situation of the economics. Additionally, an increase in the money supply can also be imposed.

Keywords-the COVID 19 Pandemic; economic recession; Federal Reserve; Keynesian Theory; Austrian Economics

1 INTRODUCTION

From the Great Depression in the 1930s to the Great Recession in 2008, the US financial market has become increasingly complex through years of development. For example, in the case of the Great Depression, it was the bankruptcy of a few firms that caused the crisis, which crushed people's business confidence and caused a drastic downturn in the US stock market. The stock market crash decreased the employment rate and GDP and was primarily responsible for the Depression. On the other hand, the Great Recession of 2008 proves to be much more difficult to analyze. In retrospect, economists can agree that the Great Recession, also called the Subprime Mortgage Crisis, directly affects the excess subprime investments in the housing market.

However, the increasing complexity of the financial market and the US government's relatively minor role in the economy make it immensely difficult for the government to identify the problem then and there. Therefore, to prevent America from falling again into a similar recession, the US government should consider taking on a bigger role in the economy and employing different economic theories.

This paper would mainly focus on the US economy as it is the world's largest and most influential economic body. This paper will begin by examining America's present economic situation as background to our Keynesian and Austrian economics discussions. By examining the two economic theories, the study hopes to derive a comprehensive solution on how the US government should address its pandemic-induced economic downturn.

2 LITERATURE REVIEW

2.1The US Economy

1) Present Situation of the US Economy: In the light of the COVID 19 Pandemic, the US economy now stands at the brink of what seems to be the second recession in the 21st century. The pandemic outbreak in the US in early 2020 put a stop to people's regular lives as millions were forced to remain in their homes. As a result, consumption falls, investments fail, employers lay off their employees, and the entire economy sinks into stagnation. As can be expected, the US GDP falls by 3.486% in 2020, as the World Bank database reports [1]. This makes this recession the most abrupt in the 21st century, with a rate of GDP decline higher than that of the 2008 Great Recession (Fig. 1).

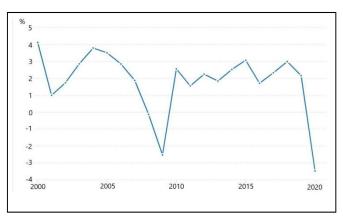


Figure 1. Annual US GDP Growth Rate [1].

In addition to official reports of the government or economic authorities, numerous economists have carried on independent researches to investigate details of the pandemic's impact on the economy. For one, Gharehgozli et al. researched New York State using a two-step Vector Auto Regression Model, a commonly used technique to predict macroeconomic changes [2]. They concluded that New York State is likely to experience a 3.99% to 4.299% decrease in real GDP

in the first quarter and a 19.79% to 21.67% decrease in the second quarter. Indeed, these figure looks grim for the entire nation as well as to New York State.

However, the problem runs deeper than ruining America's near-perfect GDP record of the century; stagnation of the economy poses a serious threat to the survival of businesses and the well-being of average American citizens. As almost everyone is aware, all businesses of all sizes and nature inflict a fixed cost regardless of whether they carry on business. These fixed costs include rents on buildings, financial capital used to purchase equipment, and the like. As a result, when numerous businesses shut down, and the entire nation goes into lockdown, these fixed costs began to eat away whatever profit businesses have accumulated. Without outside aid, businesses would go bankrupt, from the smallest to the largest, if lockdown continues indefinitely. Furthermore, individual citizens, especially the low-income spectrum of the population, would struggle to put food on the table in an extended period of lockdown. As workers are laid off and personal income suspended, people would have to use their personal savings to support their day-to-day living. Just like business profits, people's savings would eventually run out, leaving them with nothing to live on. To illustrate the magnitude of the crisis, researchers report that the unemployment rate rose from 3.6% to 10.1% in a matter of months, and industrial production falls by 9% [3]. But eventually, when the economy returns to its potential level, in the long run, businesses and individuals will live, yet, as economist John Maynard Keynes put so aptly, "in the long run, we are all dead" [4]. Surely, without government aid, both the US economy and society face imminent collapse.

2) US Government and Federal Reserve Policies in Response to the Economic Crisis: Aware of American citizens and their businesses' plight, the US government and the Federal Reserve launched a series of economic policies to alleviate their predicament. Since March, the Federal Reserve has lowered the federal funds rate by 150 basis points and began buying Treasury bonds and securities, all of which qualify as expansionary monetary policies [3]. Through these policies, the Fed hopes to increase the money supply and open up borrowing restrictions, making it easier for people to support themselves. Meanwhile, Congress passed a law that loans money to small businesses, expanded unemployment benefits and health care, and even send direct financial aid to unemployed workers [3]. In doing these, the US government hopes to provide relief to individuals and keep businesses from going bankrupt.

Despite both the Fed and the Government's immense efforts to provide relief to the economy, many economists and critics argue that the results of the government's actions are less than satisfactory. For example, Chetty et al. argue that although government and Fed expansionary policies provide higher liquidity to firms, the excess currency is channeled more into health care than to increase employment, thus having little impact on the unemployment rate [5]. In response to this problem, Barrero et al. propose that the government provide incentives to workers to look for jobs instead of merely encouraging businesses to hire workers [6]. On the other hand, other economists find fault with some of the counter effects of government policies. Some argue that the increased inflation rate, one of the most probable outcomes of expansionary monetary policies, destabilizes the economy and prevents long- term development. Others cite the increased national debt from government borrowing as an example of fiscal irresponsibility. As is common in all cases of government policies, academia is sharply divided in opinions.

It is precisely this context that inspired the authors of this paper to look back in history and at Keynesian and Austrian economics to derive a viable solution that the US government could

employ to counter the economic trend and to keep America from falling into another recession.

2.2Keynesian Economics

1) Background: Keynesian economics is a set of economic thoughts developed by John Maynard Keynes and his later followers. Keynes believed that the central government should use deficit finance to stimulate expenditure, create investment, and supplement the lack of aggregate demand to prevent a large amount of unemployment in the recession phase of the economic cycle. This mechanism, along with the investment multiplier, enables governments could raise income to the level of full employment [7].

According to Eatwell, John, and Murray Milgate's book, The Fall and Rise of Keynesian Economics, Keynesianism was born in the 1930s [8]. Before the emergence and spread of Keynesian economics, the dominant economics was traditional economics represented by Marshall and Pigou. Neoclassical economics dominated mainstream academic circles in terms of theory and policy. Keynesianism was born in the context of the Great Depression and state interventionism. Criticizing the neoclassic employment theory, Keynesian economics inherited the mercantilism of state intervention, Malthus's theory of insufficient effective demand, Mendeville's theory that high consumption promotes prosperity, and Hobson's excessive savings leading to unemployment and the theory of economic depression.

2) Researches of Keynesian Economics: Followers of Keynesian economics, such as British economists Harold, Robinson, and Hicks, and American economists Hansen, Samuelson, etc., have adhered to Keynes's basic ideas and made their theoretical and policy decisions. Many important developments have been made that became major tenets of Keynesian economics. These developments include: using relative income hypothesis, life cycle hypothesis, and permanent income hypothesis to supplement Cases' consumption function theory-absolute income hypothesis. He also made Keynes's theory of national income determination long-term and dynamic and put forward various growth models to explain economic growth.

In one of his articles, Blinder mentions that Keynesian economics gave a straightforward explanation of the causes of the Great Depression in Europe. However, other economic theories such as neoclassicism cannot provide relevant explanations.

The US government applied Keynesianism in its fiscal stimulus plan in 2009. By implementing financial assistance and increased federal and state government spending, the government had been able to keep the unemployment rate from rising above 10%, as opposed to the previously expected peak of 16% [9]. Keynes' most important contribution is his belief that the economic environment is not ergodic or not necessarily dominated by typical characteristics. For Keynes, the unpredictability of the economy always threatened people's confidence in the traditional expectations of order and stability in economic affairs, while the Austrian school argues the opposite [10].

2.3Austrian Economics

1) Background of Austrian Economics: The Austrian school took on a holistic view of how the entire economic system works. The Austrian school understands how useful institutions, including the market system itself, currency, common law, ethics, and language, evolve spontaneously through natural selection rather than through the conscious implementation of

any overall design [11].

Classical economics mainly focused on the exchange theory of value. In the late 19th century, it also began to focus on peripheral cost and value concepts. While marginalist has great influence, there has also been a school that focuses on Menger's ideological development, called the "Austrian School", which focuses on explaining economics from the perspective of subjective psychology and utility analysis. The Austrian school of economics also completely opposed Keynes's theories and policies. They demand that the government reduce control, protect private property, and defend personal freedom [12].

2) Austrian Economics - Theory: In his book The Theory of Money and Credit, Austrian economist Mises stated that the central bank's manipulation of money and credit distorts interest rates and the structure of production [13]. This process inevitably leads to bankruptcy. Years later, Austrian economist Hayek perfected the production structure concept, arguing that the interest rate is actually the price difference between different production stages obtained by capitalists in the long- term equilibrium. Interest rates will fall or rise according to changes in the consumption-investment ratio. He used this to show that the extension of the production structure is either sustainable or unsustainable, depending on whether it is caused by an increase in voluntary savings or credit expansion. Together, Mises and Hayek used ABCT to explain the occurrence of the Great Depression and the government's inability to use deliberate policies to correct misaligned structures [12]. Later, Rothbard's production theory synthesized the earlier Austrian ideas and provided Hayek's latest explanation of the Great Depression. The Great Depression in the United States proved the inherent instability of free-market capitalism and the need for the government to manage the economy to avoid social ills such as economic fluctuations and mass unemployment. Rothbard believes that the Fed's inflationary credit expansion in the 1920s led to an unsustainable bubble that led to the stock market crash of 1929 [12]. No doubt, Rothbard's Austrian interpretation is in sharp contrast with the prevailing Keynesian interpretation.

2.4Comparison

Keynesianism appeared later than Austrian economics, but it was complete and thus more widely accepted by the public than Austrian economics. In terms of research methods, Keynesian economists tend to use a series of complex methods, such as detailed mathematical models and unrealistic human behavior models, to predict the economy's future. On the other hand, the Austrian school uses simpler methods of logic and reasoning to understand human economic behavior and processes. In other words, in the case of personal investment, Austrian economics is more respected, but Keynesianism can solve economic depression more effectively and quickly [10].

3 RESULTS & DISCUSSION

In this article, it is obvious that government should use combinations of different economic measures against recessions.

Keynesian fiscal policies, for example, are the most effective solutions for economic recessions. During a recession, the government could spend a larger amount of money on infrastructures congestions, subsiding private sectors, or only by investing in the economies to create liquidity. The government could also decrease the tax rate, either direct taxes or indirect taxes. Direct income tax rates over corporations and individuals can be reduced. With actually increased income, people will tend to spend more, which could lead to a general improvement in the field of investment and consumption.

Therefore, an increase in government spending and a decrease in taxation in many fields are indispensable in saving the economy.

On the other hand, the government should maintain a stable capital tax rate since it is not a general tax like income tax. If capital tax, for example in heritage tax, decreased, it might induce an increase in the aggregate demand of the economy, but at the same time sheds light on the income inequality. Governments could also reduce indirect tax on certain products to motivate consumers to purchase more units of the products.

Additionally, the decreased tax rates reduce the production costs of corporations. With lower costs, corporations would likely increase their production level. In the case where every manufacturer increases their production level, the long-run aggregate supply, which measures the potential maximum output, tends to increase as well. Taking the advantages of reducing the the income tax rate in the election, the masses can be motivated to vote for the tax reducers, whereas it is generally bad for the sustainable economic development. In Japan, the direct taxes are generally lower than other regions, which the result in a high indirect tax rate. The consumer good can be added with extremely high margin of tax. However, statistic has shown, once the government has any increases in income tax of capital tax, there tends be a improvement in tax revenue. For instance, once the capital tax rate increased for 10%, 100 billion Yen can be raised to support the government spending. However, the additional 5% increase in indirect tax, which tends to less likely to be seem by citizens, can actually have only little increases in overall tax revenue. Taking the advantages of reducing the the income tax rate in the election, the masses can be motivated to vote for the tax reducers, whereas it is generally bad for the sustainable economic development. In Japan, the direct taxes are generally lower than other regions, which the result in a high indirect tax rate. The consumer good can be added with extremely high margin of tax. However, statistic has shown, once the government has any increases in income tax of capital tax, there tends be a improvement in tax revenue. For instance, once the capital tax rate increased for 10%, 100 billion Yen can be raised to support the government spending. However, the additional 5% increase in indirect tax, which tends to less likely to be seem by citizens, can actually have only little increases in overall tax revenue.

Fiscal policies actually consist of supply-side and demand- side policies, depending on their range of effects.

The Austrian school of economies, however, believes that the recession is an inevitable period of economic activities, according to its Austrian Business Cycle Theory, and that sufficient information through price-signaling is vital to the overall economic health. They argue, the while the recession occurs with a general fall in the price level, the inefficient allocation of resources might be the root of such an issue. It is due to the inefficiency in the production process that leads to a general high production cost of unwanted products. Austrians propose that resources should be reallocated to their most efficient usage. Thus, entrepreneurs need information from different industries to help them to invest in the most rightful industry to prompt the most efficient allocation of resources. In summary, to deal with an economic recession with the Austrian and Keynesian schools of economies, the US government should enact a series of policies. First, it should use fiscal policy to increase government spending over infrastructure, subsidy, or direct investment, and decrease tax rate over income and consumption. Secondly, it should give signals to the entrepreneurs that resource reallocation should be imposed to help with a more efficient resource allocation. Lastly, information on the economy's current situation should also be given to the entrepreneurs to help them with the resource reallocation.

However, there are also other schools of economics besides these Keynesian and Austrian economics, inclusing the neo- classical and monetarist schools. Neo-classical economists believe that the nation's output level should be in equilibrium with the money supply, but they do not believe that the national output could change in the short run. Therefore, in order to maintain a sustainable economic growth, the government or the central bank should increase the money supply gradually. This could motivate aggregate supply to increase. But for the monetarist schools of economies, increase in money supply is the only effective way to resolve economic problems. With increased money supply, the interest rate tends to decrease. With the decreased interest rate, people tend to buy more and invest more, which create liquidity in the economy.

In summary, the neo-classical and the monetarist schools mainly focus on the money supply. Therefore according to them, the increase in money supply is effective in resolving

recessions. This is generally true, however, if economy faces a liquidity trap, changes in money supply will have negligible impacts.

But if the economy is not in a liquidity trap, increases in the money supply can have significant impacts. The amount of increase should be moderate accord to the current level of output of the economies. Quantitative easing, decrease in discount rate, and require reserve ratio can be used to increase money supply of economies.

As a result, the increase in money supply could also be a way of saving the economies out of the recession.

4 CONCLUSION

To make a final statement of how to resolve an economic crisis, many fields should be considered.

First and foremost, the US government could consider employing economic policies developed by different schools of economies, as discussed previously. Firstly, it should use Keynesian fiscal policy to increase government spending on infrastructures, subsidies, or direct investment and decrease tax rate over income and consumption. Secondly, it should give signals to the entrepreneurs that resource reallocation should be imposed to help with a more efficient resource allocation, as the Austrian school proposes. Thirdly, information on the economy's current situation should also be given to the entrepreneurs to help them with the resource reallocation. And finally, the US government should consider increasing its money supply.

When the recession subsides, the government should promote economic efficiency. For example, it should promote developments of new industries, technological advances in existing industries,

all of which pertain to supply-side policies.

Last but not least, the government should maintain the balance between regulation and freemarket as a combination of both could foster market development. If free-market power is the engine of economic growth, then the regulations can ensure economic well-being even in times of chaos and uncertainties. Therefore, to maximize gains of the free market, the US government should impose specific regulations to prevent market failure and to maintain the economies' health.

It can be quite different to solve the economic crisis comprehensively. According to the American economic performance of the last decade starting from 2008, the policies imposed by the U.S. government have only limited usefulness. In practice, the entire economy with a bunch of economists, bankers, and politicians can barely handle the crisis. Therefore, the difficulties of solving such a crisis can be seen clearly. Through this article, a perfect solution cannot be carried out.

In comparison, if the crisis happened, the saving of the marketing can be quite different. China, which consists of many uncertainties in the economy, those issues cannot solve immediately, the country then let such problems go with economic growth. Balance was maintained inside the economy with many other measures: unemployment, the one kid policy, inflation, reform, and opening up. Therefore, this paper tried to convince that the economy can be maintained in a balance while it is growing moderately. By careful moments and policies, the economic crisis can be prevented at the first stage.

In the next article, about how to maintain a balance while the economy is developing can be discussed in the future.

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