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Can Cash Subsidies Improve the Lives of Residents in an Epidemic?

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Abstract: People say that there is no free dinner in this world. However, this is not necessarily true in United States, maybe only in United states. Because when you get 1200 dollars subsidy for only being alive, you actually do get free dinner. During the covid-19 pandemic, the federal reserve adopted a series of actions to stimulate the economy. Among those policies, the most famous one is The CARES Act, a form of direct cash subsidy. Although it sounds a little ridiculous that government directly give people money, the policy did contribute a lot to the recovery of the whole US economy. However, it may appear that direct cash subsidies contribute to the recovery of US economy without a cost in the short run, cash subsidies are the cause of debt and other issues. This paper quotes data that were published by the US departments, striving to reveal the effects of US policies during pandemic, therefore offer valuable experience and guidance for policy-making in the future.

Keywords: Economy policies, cash subsidy, short-term stimulation

1. Introduction

Starting the end of 2019, the largest epidemic after SARS in 2008 appeared. Covid-19 was thought to be the force majeure with biggest influence on globe's life. As of August 22th, 2023, over 700 million people were infected with the covid-19, including about 7 million died. The covid-19 epidemic not only posed an indelible threat on people's daily life and safety, it also knocked the globe's economy back. While countries all adopted their own policy to combat the epidemic, this passage focuses on US countermeasures.

2. Literature Review

To reverse the negative impact of the covid-19 epidemic on US economy, the American government figured out a way to stimulate the economy by giving out cash subsidy. Cash subsidy seems like to be an innovative policy throughout the history. Here are a couple of empirical studies that support the use of cash subsidy. Giving out cash subsidy increase both the government spending and money supply on the society. According to Wilhelmine who conducted research on the relationship between government spending and money supply on unemployment rates in Namibia, it was found out that "findings from the short-run model indicate that government expenditure and money supply relate negatively to unemployment and are both statistically important [1]. Also, according to Mankiw and Taylor, an increase in money supply will lead to a rise in consumption and investment expenditure which ultimately increase the aggregate demand thereby reducing unemployment. The policy of giving out cash to the crowd seems to be the fastest way to increase money supply on the society and therefore stimulate the economy in the most soon future.

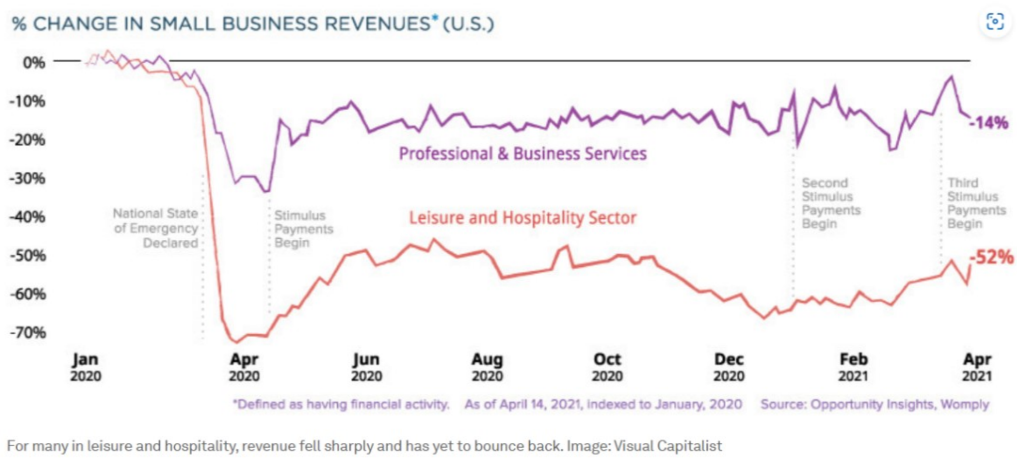
3. Types of economic policies

Economic polies, including fiscal policy and monetary policy, are a way to modify the pace of the economic growth [2]. An economy that is growing too fast is like a race car, facing the danger of colliding all the time. An economy that is growing too slow also consume too much fuel. The most common economic policies include tax rates, federal reserve rates, interest rates and so on. All these policies assumed no big turbulence in economy [3].

4. The Covid-19 Epidemic and U.S. Cash Subsidy Policy

However, as nobody would have expected, the most serious epidemic occurred on 2019. To recover US economy that was severely striked by the epidemic, US government came up with an unusual policy- giving cash subsidies to the crowd. The policy was called The CARES act. In the following sections of the passage, I would introduce the background of The CARES act and the outcomes of the act.

Although the covid-19 was first detected at the end of 2019, it took some time for the epidemic to spread to a world-wide scope. On March 11, 2020, WHO (World Health Organization) declared covid-19 to be a global epidemic of infectious diseases. According to data from The New York Times, there were almost no diagnosed covid-19 patients in US. However, the situation underwent a significant change in March, 2020, thousands of patients were diagnosed every day in US. Therefore, even though the policy we discuss in this passage was adopted on March 27, 2020, we use data from the third quarter of the year as a comparison to indicate the effects of the policy. Considering that the epidemic was at its worst during the second quarter, economic data from the second quarter does not provide reference value. Plus, there must be some time intervals for a policy to be fully adopted, and fully recognized by the crowd. If the US government did not take any actions to stimulate the economy, the situation would likely be much worse [4].



Note: Source: World Economic Forum.
Figure 1: U.S. Small Businesses Operating in a Pandemic.

People's daily life shut down overnight, that was probably one reason that people had a deep impression of the epidemic. Suddenly, interactions between people were cut off. Schools turned into online teaching; factories and restaurants closed, some for temporarily, some for permanently. Small to medium-sized companies shut down led to a decrease in the revenues, hence that they did not get enough money to pay the wage. According to the data on figure 1 from Lman Ghosh from The World Economic Forum, the revenue of different small to medium-sized companies dropped tremendously after the epidemic happened in US.

Obviously that business' revenues could not support them to hire as many employees as before the epidemic. Although some job can be done remotely, it was not possible that every one could find a job when being quarantined. Most parts of jobs could not work remotely. Therefore, companies had to cut off those jobs that could not work remotely, leading to the rapid growth of the unemployment rate. According to the data from BLS (Bureau of Labor Statistics), the unemployment rate April 2020 reached shocking 14.7 percent [5]. Even though the unemployment rate dropped to some extent (with the help of effective policies), the record high revealed well about the situation of US society. The direct result of people being unemployed is the decrease of the whole society's income. Also, according to the data from BEA (Bureau of Economic Analysis), net earnings of American citizens dropped 27.5 percent [6].

People really had a bad time, huge number of workers unemployed had to struggle to support their families and had no extra money to spend on consuming goods. According to the data published by BEA (Bureau of Economic Analysis), on the second quarter of 2020, consumption of almost all goods in US decreased critically. With no surprise, the personal consumption expenditure, which appears on the row 9, dropped 33.2 percent compared to the first quarter of 2021. Row 22 reveals of the health care spending by US citizens. Surprisingly, health care spending also dropped 53.7 percent. Considering that people infected with Covid-19 would spend more on health care, this datum could be considered as a sign of decreasing spendings [7].

The economy at that time was out of track. Us government realized that they had to do something to save the society from collapse, that was the time when different kinds of economic policies got adopted. Starting March 27th, 2020, under presidency of Donald Trump, The CAREs Act was launched. The purpose of The CARES Act was to stimulate the economy on the buyer's side. As mentioned earlier, domestic spending dropped critically because people did not have extra money to spend on goods. Therefore, the most direct way to bring the economy back on track is to give out money. The CARES Act planned to provide a subsidy of 2.2 trillion dollars to stimulate the economy. Citizens who submitted the tax return form could receive 1200 dollars subsidy per person. Considering that the unemployment rate reached record high, The CARES Act also gave 600 dollars subsidy to the unemployed per week. To further reverse the trend of increasing unemployment rate, the act provided forgivable loans to small businesses to pay wages. Considering that 2.2 trillion dollar that was spent on the act counted as 10 percent of the 2022 whole year GDP, we would expect a very ideal result.

After the policy was fully adopted and the economy was brough on track, various indicators show optimism. (according to the quarterly services mentioned above) Consumption in third quarter increased 40.7 percent compared to second quarter. According to figure 2, Unemployment rate also fell to 8.4 percent on April. Referring to figure 1, revenues of small business showed an observable rebound after the policy was adopted.

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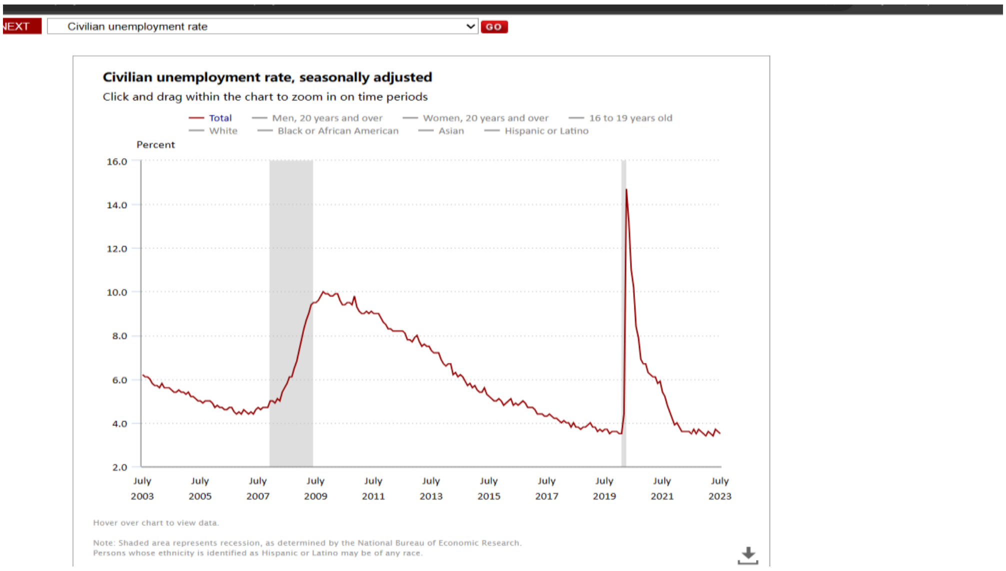

Note: Source: Civilian unemployment rate (bls.gov).

Figure 2: Changes in the unemployment rate of the population

5. Shortcomings and the Prospects of the Policy

Although we cannot deny that the policies adopted by the US governments were effective for the recovery of the US economy, decreasing of the unemployment. The policies do have some shortcomings. First, the government gave out 2.2 trillion dollars to the crowd for them to spend and stimulate the economy. 2.2 trillion is a huge number given that the gross domestic product of US 2020 was 21.43 trillion. The subsidy for this act took up about 10 percent of the whole year GDP. That huge amount of money didn't come from nowhere. In fact, the US government also needed to borrow money to give out money to the crowd. According to Amadeo [8], the debt to GDP ratio in 2020 was 129%, which was the highest since 1929. Just Imagine how terrible the ratio is. The data of national debt growth by year provided a new angle to the problem. According to figure 3, in 2020, the national debt growed by almost 20 percent, which was also the highest in recent years .. The huge amount of cash subsidy also brought huge pressure of debt to the US government.

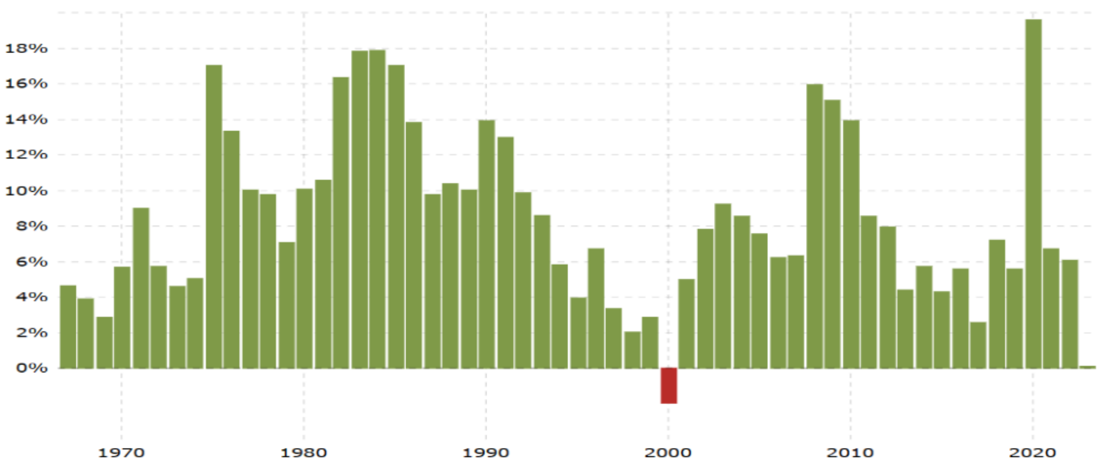

Figure 3: Trends in national debt growth rates in recent years.

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6. Conclusion

The other problem with cash subsidy is that it does not directly increase the country's capacity to produce. Even though people got more money to spend on products, neither tool to produce or workers' knowledge got improved. Therefore, the capacity to produce is not improved. In the future, when facing even more crisis, the government need to borrow more to stimulate the economy. Hence, cash subsidy only serves to stimulate the economy in the short term. In the long term, to prevent crisis, countries need to invest in the improvement of tools instead of relying on the short- term stimulation [9].

References

[1] *Shigwedha, W.N., Kaulihowa, T. (2020). Investigating the Effects of Government Expenditure and Money Supply on Unemployment in Namibia. Journal of Economics and Behavioral Studies. 12: 73-83.*

[2] *Black, S.E., Devereux, P.J., Løken, K.V., & Salvanes, K.G. (2014). Care or Cash? The Effect of Child Care Subsidies on Student Performance. Review of Economics and Statistics, 96(5): 824-837.*

[3] *Colombo, M.G., Croce, A., Guerini, M. (2013). The Effect of Public Subsidies on Firms' Investment–Cash Flow Sensitivity: Transient or Persistent? Research Policy, 42(9): 1605-1623.*

[4] *Schwartz, G., Clements, B. (1999). Government subsidies. Journal of Economic Surveys, 13(2): 119-148.*

[5] *The Economics Daily: U.S. Bureau of Labor Statistics (2020) Unemployment rate rises to record high 14.7 percent in April 2020. https://www.bls.gov/opub/ted/2020/unemployment-rate-rises-to-record-high-14-point-7-percent-in-april-2020.htm*

[6] *Bureau of Economic Analysis. (2020). Personal Income by State, 2nd Quarter 2020. https://www.bea.gov/sites/default/files/2020-09/spi0920_0.pdf.*

[7] *Quarterly Services - Historical Quarterly Services Releases (census.gov).Quarterly Services - Historical Quarterly Services Releases (census.gov)*

[8] *Amadeo, K. (The Balance) (2023) US National Debt by Year. https://www.thebalancemoney.com/national-debt-by-year-compared-to-gdp-and-major-events-3306287*

[9] *Salehi-Isfahani, D., Wilson Stucki, B., Deutschmann, J. (2015). The reform of energy subsidies in Iran: The Role of Cash Transfers. Emerging Markets Finance and Trade, 51(6): 1144-1162.*