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Analysis of Unconventional Monetary Policy of the Federal Reserve after Financial Crisis

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Abstract: In the 2008 global economic crisis, the United States experienced a severe financial crisis and economic recession. In response to the economic crisis, the Federal Reserve authorities immediately launched a response: some unconventional monetary policies, such as quantitative easing, liquidity tools and so on. But what has been the result of these unconventional monetary policies? What are the implications for the future? By collating and analyzing the annual GDP growth rate, unemployment rate, inflation rate and Gini coefficient of the United States since 2008. It is known that these unconventional monetary policies eased the economic crisis in the short term, stimulated the economy, reduced unemployment and successfully avoided deflation. But at the same time, the implementation of these policies also produced excess financial bubbles, aggravated the structural imbalance of the US economy, and greatly exacerbated the gap between the rich and the poor. Therefore, such policies alone cannot be effective in long run. On this basis, it is necessary to cooperate with other economic policies, such as fiscal policies, industrial reforms and industrial policies, to make up for the shortcomings and negative effects of existing policies.

Keywords: Global economic crisis, The annual GDP growth rate, The Federal Reserve authorities, Economic policies

1. Introduction

The 2008 economic crisis caused a huge impact on the US economy. According to the United States, in the fourth quarter of 2008, the national gross domestic product fell by 6% to -2.6% in 2009; the unemployment rate soared in response, rising to the second-highest level on record, 9.3% in 2009, up 3.5% from 5.8% in 2008; and the Fed's dual goals of keeping inflation at 2% and stable employment were all collapsing [1]. The interest rate fell to the lower limit, and bank lending and liquidity traps made the Federal Reserve use unconventional policies: quantitative easing and a series of unconventional monetary policies. Although this series of unconventional monetary policies adopted by the Federal Reserve reached its target in the short term and effectively prevented the occurrence of deflation, it had a profound impact on the economy of the United States and the global economy. How does unconventional monetary policy work and affect the overall economic situation, and what are the risks of long-term implementation of such policies in the future? While using unconventional liquidity tools to boost the economy, how should the negative effects of such tools be mitigated or reduced? The current era is in the overall economic downturn period, and the analysis of the above problems will help to understand and better look forward to the future economic situation.

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2. Unconventional monetary policy

Traditionally, the Fed has influenced market liquidity mainly through conventional monetary policy: by lowering the policy rate to inject money into the market to promote investment and consumption, or by raising interest rates to reduce liquidity, curb inflation, and guarantee price stability. But in exceptional circumstances, such as a recession, the policy interest rate has usually fallen to the lower bound, the transmission process of monetary policy is impaired, and the Fed needs unconventional monetary policies to control market liquidity.[2]

There are three main types of unconventional monetary policies: quantitative easing, credit easing, and forward guidance. The ultimate goal of these policies is the same as conventional strategies: to lower borrowing costs for companies and households, increase credit, boost aggregate demand, and ultimately raise inflation and economic output.

Quantitative easing is a non-traditional monetary policy in which a country's monetary authority operates through the open market to increase the money supply in the real economy. Credit easing means that the Fed buys corporate bonds from the market. There is no difference between the purchase of corporate bonds and the purchase of government bonds, but the risks of corporate bonds are relatively large, and the purchase of corporate securities may expose the Fed to credit risks. But it will pump money directly into businesses. Forward guidance is a policy of the Federal Reserve to guide market expectations by issuing news about future interest rates.

The main objective of a series of unconventional monetary policies, such as quantitative easing, is to further ease liquidity risks in the financial system and lower long-term interest rates to boost the real economy.

3. The implementation of the Federal Reserve's unconventional monetary policies after the 2008 economic crisis

In 2008, in order to restore the operation of the market, the Federal Reserve injected liquidity into the market and effectively stimulated the recovery and development of the economy in the short term by implementing comprehensive measures such as quantitative easing, credit easing, forward-looking guidance, and stabilizing the foreign exchange market.3.1 Quantitative Easing:

During the period from November 2008 to March 2010, the Federal Reserve carried out the first round of quantitative easing, the main purpose of which was to rebuild the credit of financial institutions by purchasing state-guaranteed financial assets and inject liquidity into the credit market. During that period, the Fed bought $1.725 trillion, including $1.25 trillion in MBS, $300 billion in long-term Treasury bonds, and $125 billion in agency debt.

3.1. Easy credit

During 2007 and 2008, the Fed purchased large amounts of Treasury and mortgage-backed securities through open market operations, reducing market funding costs and increasing liquidity. For banks and financial institutions, the Fed cut the reserve rate by a total of 150 basis points and the discount rate by a total of 50 basis points, while investing a large amount of reserves. New instruments were also introduced: the Term Auction Facility, the Term Securities Lending Facility and the Primary dealer Credit Facility. The liquidity validity period is directly extended.

For example, on March 16, 2009, the Federal Reserve announced it would take emergency measures to increase liquidity, approve the financing arrangement for JPMorgan Chase's acquisition of Bear Stearns, establish the primary dealer credit facility, and lower the credit interest rate by 25 basis points, extending the maximum maturity to 90 days. The ability of financial institutions to purchase high-quality securities directly from money market mutual funds has stabilized the prices of financial assets.[3]

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3.2. Forward-looking guidance

In the face of the background of the previous subprime crisis and the current economic downturn, in order to stimulate residents' consumption and investment and offset the negative impact of the current liquidity trap, the Federal Reserve has raised the expected inflation rate. This increases the pressure on people to buy assets, forcing them to invest and consume, thereby increasing liquidity.[4]

3.3. Stabilize the money market

In order to maintain the stability of the currency, the Federal Reserve implemented the policy of currency swaps. The European Central Bank established a foreign exchange swap facility in response to pressures in short-term dollar funding markets. By signing currency swap treaties with other countries, the currency can be exchanged and recovered in the long run according to the original amount of currency lent, eliminating the capital loss of the exchange rate difference, and increasing the stability of the currency market.

4. The effects of unconventional monetary policies

4.1. Effectively recover the economic downturn

According to the data of the Federal Reserve from 2008, a series of monetary policies implemented by the United States saved the continuous downward economic situation and eased the financial crisis. In the immediate aftermath of QE in September 2008, $1 trillion of reserves were created. The collapsed banking sector recovered and financial markets began to flow again. As can be seen from figure 1 and figure 2, since 2009, the GDP of the United States has changed from a negative 2.6% to a positive growth rate, and reached a relatively stable value of 2.7% in 2010. Unemployment continued to fall from 2010 to 2019, before rising in late 2019 in response to the global COVID-19 outbreak[1]. This indicates that unconventional monetary policies have effectively stimulated the growth of the US economy and controlled the unemployment rate.

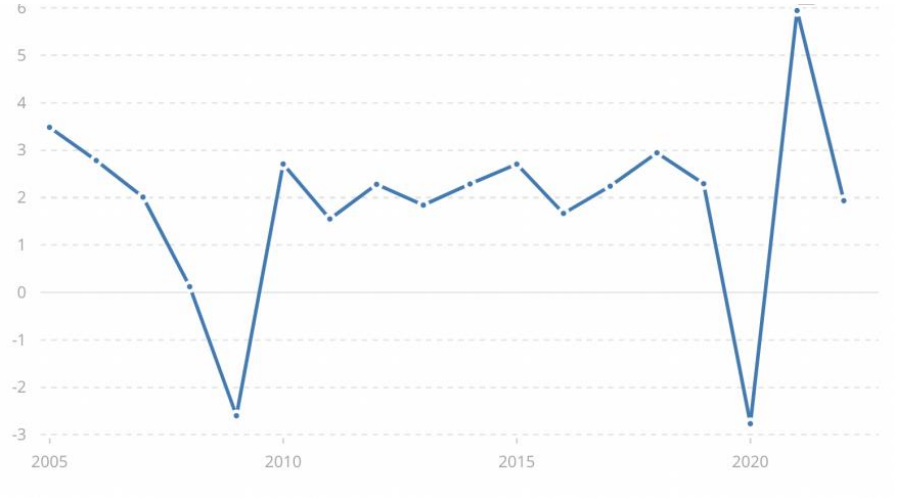

Figure 1: US gdp Growth rate (annual)

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Figure 2: Total unemployment in the United States as a percentage of total labor force (unemployment rate)

4.2. Effectively preventing deflation of inflation

The annual inflation rate as measured by the consumer price index increased from negative 0.4% in 2009 to positive 1.6% in 2010, and then began to decline to 3.2% in 2011 as shown in figure 3, so the implementation of this series of unconventional monetary policies did not have a significant effect on the inflation rate[2]. But it managed to avoid the risk of deflation in the interim.

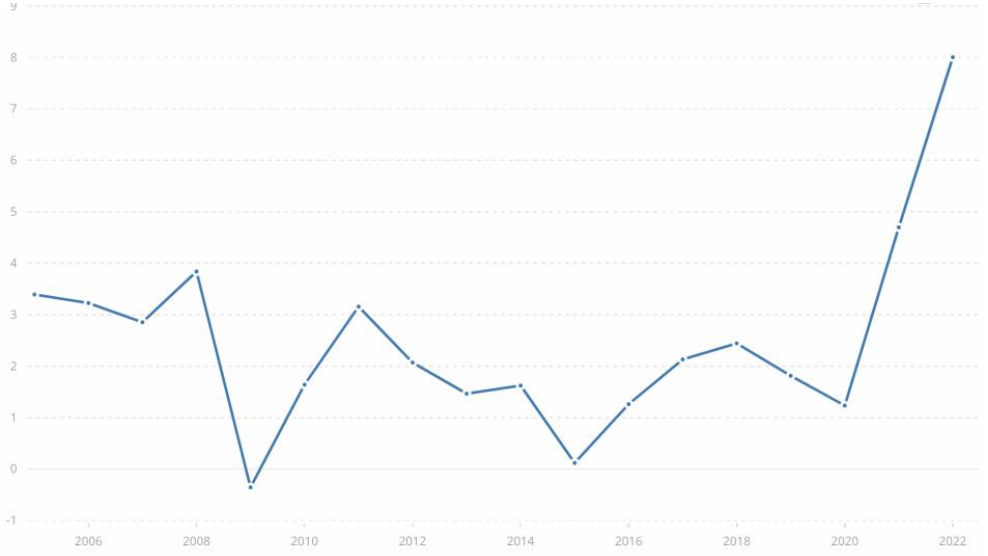

Figure 3: Inflation as measured by the Consumer Price Index (annual)

4.3. The formation of excessive financial bubbles

From a long-term perspective, the use of excessive quantitative easing policy promotes the continuous low interest rate and a large amount of liquidity in the market, which attracts a large number of investors to invest assets in real estate and other fields. Excessive investment is accompanied by the continuous price expansion caused by the multiplier effect. A sudden rise in prices will inevitably lead to excessive financial bubbles, and once the bubble begins to burst, the entire market price will collapse, resulting in the entire economy. For example, the US real estate bubble crisis in the 1920s

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led to the Great Depression, which had an irreversible negative impact on the US economy [3]. While the US dollar is in a dominant position in the global economy, once the US dollar is no longer stable, it will have a direct negative impact on the international trade balance.

4.4. It exacerbates the wealth gap in the United States

Judging from the recent annual inflation rate in the United States, since the quantitative easing policy was adopted in the United States, people's real income has far failed to keep up with the inflation rate, and residents' investment ability has also declined, resulting in economic stagnation [4,5]. As a result, real wages have failed to keep up with rising inflation, and low-income people are in a very difficult situation, increasing the burden and pressure on their families.

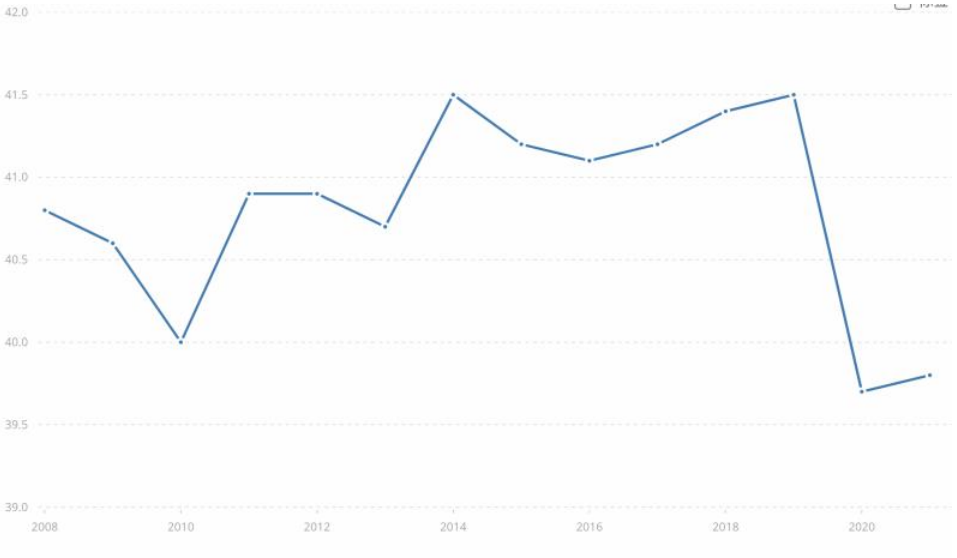

Figure 4: American Gini coefficient

Under such an accommodative monetary policy, persistently low interest rates have largely inflated asset prices. It pushed up the share of wealth for households at the top, but had little effect on the majority of households at the bottom. So rich people get richer, and poor families get poorer in relative terms. According to the World Bank, with the implementation of monetary policies and tools such as quantitative easing at the end of 2008, the Gini coefficient in the United States has been climbing every year after a brief decline to 40 in 2010. As of 2014, it has reached a record high of 41.5, contributing to further imbalances in the economic structure of the United States as shown in figure 4 [6].

5. Conclusion

This paper discusses the application and influence of unconventional monetary policy in dealing with financial crisis.

In the face of the global financial crisis in 2008, after the United States implemented unconventional monetary policies, a series of European central banks began to use them, and Japan followed suit, and all of them improved their own economic conditions.

Although this series of monetary policies in recent years has been close to the normal convergence, and in the short term can be very effective to promote economic recovery, but it brings a series of negative effects: excess bubbles, economic structure imbalance and so on can not be solved. So we need to coordinate with other policies to eliminate these effects as much as possible.

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Although this series of monetary policies in recent years has been close to normal convergence and, in the short term, can be very effective in promoting economic recovery, it brings a series of negative effects: excess bubbles, economic structure imbalances, and so on. So we need to coordinate with other policies to eliminate these effects as much as possible.

The implementation effect of monetary policy is not immutable, but needs constant adjustment as the economic situation changes. When we implement monetary policy, we should pay close attention to changes in economic indicators and data, evaluate the effectiveness of the policy in a timely manner, and make necessary adjustments. Moreover, monetary policy alone often cannot solve all economic problems, so we need to integrate monetary policy with other economic policies, such as fiscal policy, structural reform, and industrial policy, to achieve a more comprehensive and durable economic recovery.

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