

Research on the new Keynesian and monetarist economists' responses to the 2008 financial crisis in the USA

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Abstract. This article's main topic is How New Keynesian and monetary response to most countries' business cycle recession. The purpose of choosing this topic is to study how new Keynesian and monetarist economists respond to the 2008 financial crisis in the USA by an easy way from definition-model-reality to analyze the question. Using a case study and comparative analysis, this paper research Model explanations of the Great Recession in different methods and causes of the great recession from 2007 to 2009. Moreover, this paper shows that the primary distinction between new Keynesian and monetarist approaches to the Great Recession is the use of the government budget and money supply. Finally, through the data and results this paper obtained, readers may have a clearer understanding of the practicability of these two theories so that they can make a better choice according to the real situation. In addition, it lets the readers understand the question and provide more research information for the researchers in the future.

Keywords: New Keynesian, Monetarist economists, Financial crisis, USA.

1. Introduction

1.1 Research background

For sixty years after the war, the United States financial policy history, the United States has entered a recession whenever the risk of slowing economic growth. The government will follow the Keynesian deficit spending, use financial tools to enlarge effective demand, and, to a certain extent, improve the long-term economic growth rate of fiscal investment [1]. Before the financial crisis swept the world in 2008, the Subprime Mortgage Crisis broke out in the United States in the first half of 2007. The United States Treasury Department implemented a fiscal stimulus package of 150 billion DOLLARS [2]. The early fiscal expansion measures can be regarded as an emergency rescue for the financial market in the United States. After the outbreak of the financial crisis in 2008, the United States provided direct assistance to financial institutions, promoted the financial rescue plan, and directly injected liquidity into the financial market. When the internal market loses its ability to adjust itself, factors outside the market mechanism need to come into play. The United States adopted loose monetary and fiscal policies and used interest rates to increase market liquidity. Fiscal policy and monetary policy are two new Keynesian tools to regulate the economy, intervene in the short term, and play a positive role.

Monetarism in the money supply only affects nominal variables and the price level and does not affect the actual employment and national income. Therefore, monetary policy mainly adjusts to the changes in the money supply, recovery depends on economic system adjustment to the influence of the long-term economy, and in times of crisis, monetary policies. According to the monetarist theory, Ben Bernanke, chairman of the Federal Reserve, decided to stimulate the economy by lowering interest rates and increasing the money supply in 2007. This has led to a sharp slowdown in liquidity, raising the more serious risk of deflation, and has led to further research and discussion on the role of monetarism in the economic field during the crisis and depression [2].

By summarizing and comparing the different policies adopted by the United States in the 2008 financial crisis between new Keynesian and monetarism, the conclusion will be prepared for the arrival of the next recession business cycle and provide new perspectives and thinking for research and policy improvement.

1.2 Literature review

Mishkin demonstrates what we have learned and how we should change our thinking about monetary policy strategy after the 2007-2009 financial crisis [3]. And Negro et al. provide New Keynesian models to analyze and forecast inflation rates during the Great Recession [4]. Moreover, some paper addresses the issue of restarting the economy in the post-pandemic era by drawing lessons from the stimulus policies adopted by the government during the 2008 U.S. financial crisis [5]. And some paper gives the facts about the financial crisis in the U.S. [6].

1.3 Research gap

Most researchers have elucidated how the new Keynesian methods were used in the 2008 financial crisis and if it is an efficient way to prevent or deal with the global financial crisis. Moreover, some of them also reported the main causes of the 2008 financial crisis or compared the different measurements and efficiency of new Keynesian and classical economists' responses to such a massive financial crisis. In contrast, there has not been a few papers concentrating on the differences between new Keynesian and monetarist economists in the 2008 financial crisis in the USA since there are many similarities in both methods. Therefore, the goals of this study are to find the unique measurements of new Keynesian and monetarist economists' reactions to the financial crisis in the USA in 2008 from macroeconomic demand and supply, GDP, inflation, and interest rate.

1.4 Research framework

The framework of this research will be three parts. First of all, it will present the definition of new Keynesian and monetarist economists and discuss the evaluation history of these two economic methods with some evidence. The next part will use two different economic methods to analyze the USA's measurements after the 2008 financial crisis with economic models--AD-AS model, Philips curve model, money exchange rate model to compare the efficiency of new Keynesian and monetarist methods. The last part of the paper will show the methods used in reality by different politicians by evidence and data to support the models in the second part. To sum up, this paper will discuss how new Keynesian and monetarist economists respond to the 2008 financial crisis in the USA by an easy way from definition-model-reality to analyze the question, let the readers understand the question, provide more research information for the researchers in the future.

2. Methods

2.1 Case study

To investigate business cycle recession overall, it is necessary to study some typical cases. One of the most well-known events of the business-cycle recession was the financial crisis in 2008, which had a serious negative impact on the whole world economy. Take the United States, for example. The financial crisis caused a deep economic recession in numerous aspects, such as a significant reduction in corporate profits, decreased investment, and decreased domestic consumption. In the case of that time, a scholar of new Keynesianism held the point that the fundamental reason for economic depression is insufficient effective demand. Only market forces can not solve the problem, so they believed that the government should take an expansionary fiscal policy focusing on cutting taxes and increasing public expenditure to create effective demand to boost the economy and eliminate the economic crisis. But monetarism had a different interpretation of the crisis. Under the international monetary system dominated by the U.S. dollar, the highly developed financial system of the United States created a large number of financial assets and derivatives. But because of several reasons,

including lacking proper supervision, it led to long-term global economic imbalance and eventually caused the financial crisis. Therefore, monetarist economists believe that fiscal policy has little impact on real and nominal income. So they had a point that government should reduce its influence on the nation's economic life to maintain price stability

2.2 Comparative analysis

Understanding their content is essential to figure out how these two theories work on business cycle recession. New Keynesianism has a theory to explain the non-clearing market, and it holds that individuals have a certain influence on the market. Still, its impact is too weak that not enough to coordinate the economy. So only the government's intervention can eliminate market failure to improve economic efficiency. However, monetarism has distinct views, and it holds that the private economy has its stability, and a country's economic policy might ruin the stability. As a result, monetarists did not approve of Keynesian fiscal policy. Besides, new Keynesianism and monetarism have a different understanding of monetary transmission mechanisms. The former considers mechanism is deposit reserve---money supply---interest rate---investment---total output, and it believes that monetary policy affects the economy with long and variable lags. The latter holds that the money supply directly affects the total output. Despite their disagreements, they have been able to find some common ground. For example, both of them think the government should be the one to manage basic public industry even though monetarists disagree with state intervention in the economy.

3. Model explanations of the Great Recession in different methods

This part will explain how new Keynesian and monetarists methods react differently to the Great Recession of 2007-09 through the simplest economic graphs and principles. The definition part presents that the new Keynesian method advocates fiscal policy for the recession, and the monetarist advocates a monetary policy which will be discussed.

3.1 Causes of Great Recession (2007-2009)

In 2007, housing prices began to drop as supply surpassed demand. These imprisoned homeowners were unable to make the payments yet could not sell their homes. When the derivatives' values collapsed, banks ceased lending to one another. This resulted in the financial crisis, precipitating the Great Recession[1]. In the short run, aggregate supply rises too much, and aggregate demand falls a lot; this leads to the SRAS curve shifting downwards, and the SRAD curve shifts to the left, as shown in figure1. As Figure 1, LRAS symbolizes potential GDP, and the initial equilibrium is located on the LRAS curve. However, when SRAS₀ declines to SRAS₁ and SRAD₀ drops significantly to SRAD₁, the new equilibrium is on the left side of LRAS, implying a recession gap between real and potential GDP. As illustrated in Figure 2, fluctuations in real GDP also create a recession gap in the graph, equal to the recession gap in Figure 1. In essence, the primary cause of the Great Recession is short-term oversupply, which results in shifts in the SRAS and SRAD, along with changes in real GDP, which ultimately results in the recession gap.

3.2 New Keynesian method

This section will examine how economists have used the new Keynesian methodology to recover from the Great Recession, along with the AD-AS model and fluctuations in the real GDP model.

A key component of the New Keynesian method is fiscal policy, which refers to government spending and tax policies to influence economic conditions, particularly macroeconomic conditions like aggregate demand for goods and services, employment, inflation, and economic growth, among other things. In this situation, the demand for money is interest elastic, which means that the desire for money is completely elastic in the absence of interest. An increase in the money supply does not influence interest rates, and the impact of raising the money supply does not affect increasing the demand for goods and services. Interest rates are only a little affected by changes in the availability of money. This results in minor changes in C and I, and only minor changes in A.D. As a result,

modest changes in the money supply result in small changes in GDP[7]. Fiscal policy, rather than monetary policy, is thus preferable in this circumstance. The most important aspect of fiscal policy is using the government budget to influence real GDP.

There are two methods to affect the government budget: increasing or decreasing government expenditure (G) or increasing or decreasing taxes revenue fewer transfers (T). The government spends money on various things, including purchasing products and services from businesses, utilizing tax income to pay for expenditures, and becoming self-sufficient. In this equation, the taxation revenue net of transfers (T) equals the income (Y), where t denotes the marginal tax rate, which is autonomous; T denotes the induced tax rate dependent on Y—the income. Increasing government expenditure and eliminating taxes is necessary to recover from the Great Recession via fiscal policy. According to conventional wisdom, aggregate demand is equal to government spending (G), consumption (C), investment (I), and net exports (N.X.)[8]. Consumption is defined as income minus savings and taxes; in this situation, eliminating taxation would enhance consumption, resulting in a rise in aggregate demand. Additionally, a rise in government expenditure will boost aggregate demand. Likewise, when taxes decrease, there are certain advantages for enterprises that are suppliers and will boost supply, as shown in Figure 3.

As illustrated in Figure 3, increasing government spending and decreasing taxation will increase aggregate demand, shifting SRAD0 upward to SRAD1. At the same time, a decrease in taxation will also shift SRAS downward from SRAS0 to SRAS1; the new equilibrium will be on the LRAS, resulting in an increase in real GDP to potential GDP. This trend is also seen in Figure 4, which displays the variation in real GDP due to the new Keynesian method’s influence. The new Keynesian method’s fiscal policy has expedited the economic cycle and restored real GDP to its potential level.

3.3 Monetarist method

This section will analyze how economists utilized the monetarist approach and the AD-AS model, the fluctuations in the real GDP model, the IS-LM model, and the money supply and demand model to recover from the Great Recession. Additionally, monetarists will use expansionary monetary policy in this recessionary environment to stimulate aggregate demand and shrink the recession gap because the interest rate falls, which raises investment (I) & net exports, which increases A.E., which increases aggregate demand (A.D.).

As seen in Figure 5, the money supply rose, which boosted liquidity and money and shifted the L.M. curve upwards. In figure 8, the money supply increased, resulting in a decrease in interest rates, which increased investment and net export, ultimately increasing aggregate demand and a change in the A.D. curve upward, as shown in figure 6. Thus, the growth in real GDP restores the real GDP to its potential level, as shown in Figure 7 [9]. To summarise, the monetarist approach employs monetary policy to assist the Great Recession in returning to its potential GDP level.

In conclusion, the primary distinction between new Keynesian and monetarist approaches to the Great Recession is the use of the government budget and money supply.

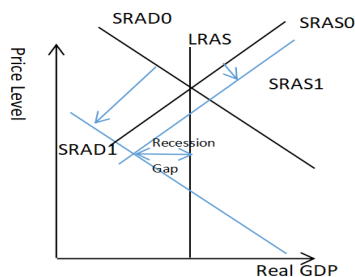


Figure 1. Causes of Recession Gap

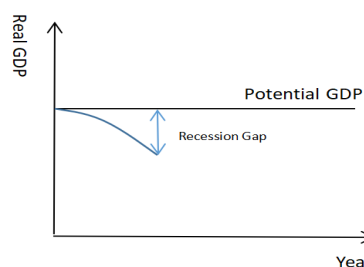


Figure 2. Fluctuations in Real GDP

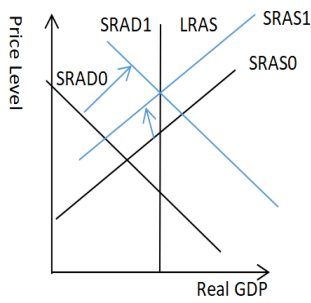


Figure 3. New Keynesian AS-AD Model

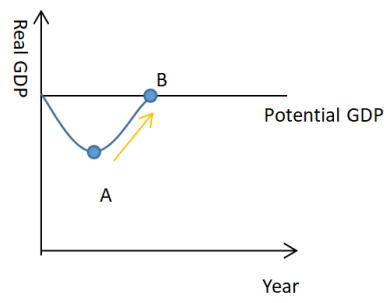


Figure 4. Fluctuations in Real GDP after effect of New Keynesian Method

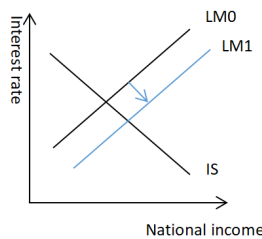


Figure 5. IS-LM Model after effect of Monetarist Method

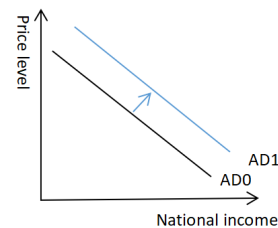


Figure 6. A.D. Model after effect of Monetarist Method

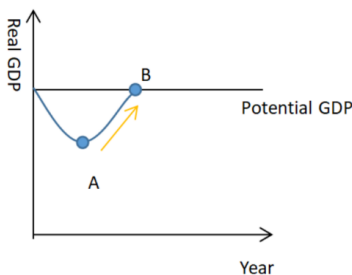


Figure 7. Fluctuations in Real GDP after effect of Monetarist Method

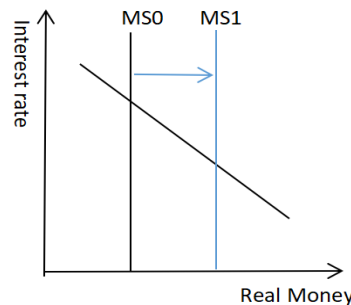


Figure 8. Money supply Model after effect of Monetarist Method

This study analyzes the differences between the 2008 economic crisis between the different new Keynesianism and monetarism and compares the economic crisis of 2008 today COVID - 19 facing the United States during the economic recession. We can draw a new Keynesian monetary policy when facing a new economic recession, and the better solutions and play a positive role in the recession when it comes.

While the Fed's approach during the financial crisis of 2007-2009 differs from that of today's COVID-19 pandemic, there is one similarity: Both recessions confronted broad financial markets, prompting the Fed to use conventional and unconventional measures to mitigate market crises[10].

Between the 2007 and 2009 financial crisis, the federal reserve eased the financial sector as the main goal diligently, threatening the unconventional monetary policy to extend the lifespan of the quantitative easing (three rounds) and bold pursuit of quantitative easing. This results during the crisis and after a long period (2007-2015) to achieve maximum effectiveness. However, the quantitative easing policy did not make the U.S. economy recover quickly and develop slowly[11].

Unlike the financial crisis of 2008, the spread and impact of COVID-19 are wide and fast. It has rapidly affected economic activities and financial markets and has a broad impact on all sectors of society. Drawing lessons and experience from the 2007-2009 financial crisis, the United States

quickly issued a series of plans, including a credit plan. It became more proficient in applying a series of unconventional monetary policies. Financial stress during the pandemic rose only briefly compared with the financial stress during the 2008 economic crisis. It then subsided rapidly, with deflation between the peak and trough of the recession. Martin S. Eichenbaum et al. introduced the New Keynesian model for this phenomenon. They then observed the positive changes in consumption, investment, and output in six developed countries through this model, providing a rationalization basis for deflation. At the same time, Martin S. Eichenbaum et al. suggested that the epidemiological model be embedded in the DSGE model to evaluate various policy interventions between outbreaks[12].

To sum up, the differences between new Keynesian and monetarist responses to the business cycle recession mainly concern the use of the government budget and money supply. This paper finds that the key component of the New Keynesian method is fiscal policy, which refers to the use of government spending and tax policies to influence economic conditions, particularly macroeconomic conditions. However, for the monetarist, employing monetary policy to assist the business cycle recession return to its potential GDP level is a more effective method. So balancing these two and other theories to make efficient and rational decisions is tough but necessary for the government.

4. Conclusion

4.1 Summary of findings

The research may help countries suffering from the business cycle recession recover rapidly. Like the United States, whenever the risk of slowing economic growth has entered a recession, the government will follow Keynesian deficit spending, use financial tools to enlarge effective demand, and improve fiscal investment's long-term economic growth rate. And the same goes for China during a time of recession. China's central bank will adjust the money supply to make it equal to money demand so that the economy will gradually go back to the right path.

4.2 Limitations and Future studies

However, this article also has some limitations. For example, it lacks using the primary data, so some of the results may have problems in practicality. Besides, the research mainly focuses on the United States business cycle recession and only consults two of many economic theories, so it can not apply to several conditions. In order to have a more comprehensive study, further surveys and interviews will be set to get more primary data. Finally, this research could cover most of the recession worldwide.

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