The Study on the Practice and Evaluation of Japan's Quantitative Easing Monetary Policy

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ABSTRACT

Japan is the first country to practice quantitative easing monetary policy, and implemented two rounds of quantitative easing monetary policy around 2008. This paper expounds the theoretical basis of quantitative easing monetary policy, analyzes the practical operation and effect of Japan's two rounds of quantitative easing monetary policy, and puts forward relevant suggestions for the implementation of China's monetary policy.

Keywords: Japan, Quantitative easing monetary policy, Comparative analysis

1. INTRODUCTION

The word "Quantitative Easing" (hereinafter referred to as QE) comes from the monetary policy practice of the Bank of Japan in 2006, which is used to solve the problem of how to get the economy out of the depression as soon as possible and restore the normal economic growth level through the easy monetary policy under the condition of zero interest rate. Under QE policy, the central bank injects excess money into the banking system by purchasing government and corporate bonds in large quantities or printing money in large quantities to stimulate economic recovery. [1]Theoretical research on QE can be traced back to the debate over the Great Depression of the 1930s, which has been studied in detail by scholars such as Friedman, Bernanke and Romer. Since then, Japan's first QE policy practice from 2001 to 2006 has enriched this kind of research, and its theoretical views have directly influenced the monetary policy measures taken by central banks of various countries after the subprime mortgage crisis in 2007.

2. THE THEORETICAL ANALYSIS OF QE POLICY

2.1 The important role of loose monetary policy in getting out of the economic depression

With the complicated "Stagflation" problem in the western economy in 1970s, the rose of the Monetarist School represented by Freedman has been promoted. They holds that: (1) The key to study the effect of money on real economy is the change of money quantity. A large number of banks went bankrupt during the great depression were related to the "tightness" of the currency environment at that time. The tightening of monetary policy at the early stage of the Great Depression aggravated the economic recession. (2) Off the gold standard system and increasing the money supply are the important reasons for deflation and depression. Because the gold standard restricts the amount of money issued, the separation from the gold standard means that the money supply constraint is disappearing and the expansionary monetary policy could be taken more freely. During the great depression, there was a obvious difference in economic recovery between the countries don't on the gold standard and those on the gold standard. Countries that did not implement the gold standard, short time to implement it, or abandoned it early, were not affected by the Great Depression or recovered from it earlier; Countries that left the gold standard later and took longer to implement it were more affected by the great depression and recovered later. (3) The monetary factor is important for aggregate demand. It doesn't agree with the view that the Keynesian school believes that the correlation between nominal interest rate and investment expenditure is not significant. Therefore, the currency does not have an effect on total demand. Instead, it considers that monetary policy may have an impact on aggregate demand. Therefore, the ideas of the monetary school provide strong evidence for the possibility of quantifying intervention. The shrinkage of the money supply is the cause of the Great Depression. By increasing the money supply, it is possible to get rid of the economic depression more quickly.

2.2 "Liquidity trap" and the effectiveness of monetary policy

Early Keynesians believe that when the nominal interest rate is zero or is close to zero, the interest rate elasticity of money demand curve is infinite, the demand for money is sensitive to infinite interest rates, interest rates change has no effect on the macroeconomic variables, in a monetary policy failure of the "liquidity trap".[2] However, the monetary school represented by Friedman demonstrated the stability of monetary demand from theory and demonstration, and believed that the liquidity trap did not exist when monetary policy failed. Monetary policy works despite extremely low interest rates. Empirical studies have shown that when interest rates fell after the great depression, there was no upward trend in the sensitivity of monetary demand to interest rates, and the "liquidity trap" that Keynesians believed did not appear.

After World War II, the challenge of monetary policy in western countries was focused on inflation. Deflation related to the "liquidity trap" became a non-mainstream research topic. Since the Japanese economy has been in deflation for a long time, the Japanese bank began to implement the zero interest rate policy in 1999. The "liquidity trap" problem has begun to have important practical significance, especially the QE policy practice characterized by quantitative easing. The prevailing view was: (1) In the case of deflation, when the short-term nominal interest rate reaches the zero boundary, monetary policy can still continue to be effective through unconventional tools. [3] (2) Managing public expectation is an important way for the economy to emerge from deflation. When the short-term nominal interest rate reaches the zero interest rate range, if monetary policy itself can affect market expectations, it will not fall into a liquidity trap and monetary policy is not absolutely ineffective.

2.3 Monetary policy strategy to stimulate the economy under the condition of zero interest rate

Academic discussions on the practice of quantitative easing monetary policy in Japan from 2001 to 2006 have provided an important theoretical preparation for the federal reserve's response to the 2008 economic crisis. In the discussion at the time, current Fed chairman Bernanke proposed three main strategies for QE policy under zero interest rates[4]:(1) Manage the public's expectation of future interest rates, central bank should undertake a commitment to the long-term low rate of interest rates; (2) Change the structure of the balance sheet of the central bank and adjust the relative supply of various securities; (3) Expand the scale of the balance sheet of the central bank. Among the three main strategies, public expectation management will play a

leading role and changes in the balance sheet only plays an auxiliary role. The Fed's current policy on QE is broadly consistent with the three strategies Bernanke proposed at the time.

3. COMPARATIVE ANALYSIS OF JAPAN'S QE POLICY IN TWO PERIODS

3.1 Japan's QE policy in period of 2001-2006

In response to the continuing economic recession, in March 2001, according to Krugman (1998)'s idea of managing inflation expectations, the Bank of Japan began implementing the first quantitative easing monetary policy in history, aiming to transfer the market One message - the central bank will try to raise the level of inflation in the future and extend the duration of ultra-low interest rates to stimulate individuals and businesses to increase consumption and investment, expand aggregate demand, and move the economy out of "liquidity trap."

The policy targets Banks' reserve requirements and changes the market's expectations of future inflation by massively increasing the supply of base money. From March 2001 to January 2004, the Bank of Japan continuously raise commercial bank reserves goal, intensify and let the market operation, increase the purchase of long-term government bonds, aim to increase market liquidity. [5]Moreover, the Bank of Japan to "quantitative easing" exit criteria are also made a clear commitment: as long as inflation levels did not present a steadily rising trend or deflation risks still exist, then the quantitative easing will not quit. While continuing to buy long-term government bonds, the Bank of Japan has also broadened its asset purchases to include ABCP and ABS as qualified collateral. [6]

It was not until November 2005 that the Japanese economy began to get out of the shadow of deflation. For the first time in the past few years, CPI exceeded 0. In the next few months, Japan's inflation rate continued to be positive, and the economy showed signs of recovery. The Bank of Japan believes that the current economic situation has met the previously stipulated conditions for quitting quantitative easing policies. Therefore, at the monetary policy meeting on March 9, 2006, the Bank of Japan decided to quit the quantitative easing policy and to take monetary policy control measures from commercial The bank's reserves have been restored to overnight Inter Bank Offered Rate, and the goal of monetary policy was reset to inflation target management system. On July 14, 2006, the Bank of Japan raised interest rate for the first time in several years, the official discount rate from 0.1 percent to 0.4 percent. Then the interest rate was raised again to 0.75 percent on February 21, 2007. At the same time, the Bank of Japan has begun to shrink its balance sheet and sell some of its previous purchases of long-term government bonds and

other assets. Japan's first round of quantitative easing has now officially ended.

3.2 Japan's QE policy after the subprime crisis in 2008

Since the Bank of Japan withdrew from its quantitative easing policy in 2006, its benchmark interest rate has increased. On February 21, 2007, the Bank of Japan raised the official discount rate to a level of 0.75%. However, just after half a year, the outbreak of the US subprime mortgage crisis once again put the global economy into a tightening cycle.

In an effort to boost liquidity in financial markets and address the growing risk of tightening, the Bank of Japan cut its overnight Inter Bank Offered Rate again to 0.3 per cent in October 2008.After the interest rates reduced to zero again, Bank of Japan started to restart to buy national debt as the main content of the asset purchase program, at the same time, Bank of Japan tried to buy more financial market instruments products, including corporate bonds , Exchange-traded funds(ETF) ， and Japanese real estate investment trust fund （J-REIT） to provide liquidity. On April 4, 2013，The Bank of Japan has launched an QE policy with infinity， unlimited duration and unprecedented strength. QE policy is Quantitative and Qualitative Monetary Easing. Qualitative means for the Bank of Japan not only expand the central bank balance sheet to provide liquidity, asset purchases and under the condition of invariable in size by changing the structure of the central bank assets to influence the market. [7]The main contents of QE policy include the following points: (1)change the monetary policy operation target from overnight Inter Bank Offered Rate to the basic currency (2)put forward more clear inflation targets (3)supply more diversified monetary policy tools. It has not only increased purchases of government bonds, but also increased annual purchases of exchange-traded funds (ETFS) and real-estate investment trusts (J-REIT). [8]

3.3 Differences between two QE policies

3.3.1 The two QE policies have a different economic situation.

During the first period of QE policy, Japan must solve the problems after its own bubble economy burst, and the external environment is relatively stable, as a result, Japan's bank implemented the loose monetary policy has continuously strengthened the bank's bad debt audit system, and inject capital into the bank to reduce the rate of non-performing loans. It also solved the problem of the recovery of financial intermediary functions by administrative means. During the second stage of QE policy, the international financial turmoil and decline of global economic trend made domestic

financial institutions more emphasis on the steady management. Credit risk appetite led to the credit shrink. The Bank of Japan use more market means. It improved financial institutions and enterprises by purchasing financial assets way of assets and liabilities, which prevented banks reluctant to lend.

3.3.2 The sustainability and scale of policies are different.

The first QE was a tentative attempt by the Bank of Japan to use it cautiously. For example, the zero interest rate policy was put into effect in March 1999 and was soon suspended in August 2000. The monthly purchase volume of Treasury bonds was also slightly increased and the time interval was long.

But in the second period of QE after the financial crisis, the continuity and scale of the policy increased significantly, such as the zero interest rate policy, which has been maintained since its resumption in 2008，the purchase of government bonds also rose from 1.2 trillion yen per month to 70 trillion yen per year. The advantage of this is that it is easy for the public to form a consensus expectation. Long-term policy commitment can let the public clearly know the policy path, but the disadvantage is that it will generate concerns about the policy space. [9]From this change can also see the maturity of the bank of Japan in QE operations and hold, and the change of policy tools and the target is along with the economic operation and to change the policy implementation effect and shows strong control ability.

3.3.3 The transmission mechanism of monetary policy is different.

During the first QE period, Japan's main use of open market operations and the orientation of loan to provide liquidity to financial institutions, it still through the credit channel of monetary policy conduction to affect the real economy, The Bank of Japan has enriched its monetary policy tools at the second QE period. Although Bank of Japan constrained by restrictions on the development of financial markets, it cannot create a variety of policy tools like the Federal reserve. But the credit easing of ETF and J - more diversified financial assets, such as REIT buy changed the central bank's balance sheet structure, through the portfolio rebalancing effect conduction effect of monetary policy, but the introduced credit easing policy changed the structure of the central bank's balance sheet through the purchase of more diversified financial assets such as ETF and J-REIT, and transmitted monetary policy effects through the rebalancing effect of asset portfolios. [10]In addition, the policy of interest rate commitment was more explicit ,the promise effect of the use of forward-looking guidance tools can effectively guide public expectations, lower long-term interest rates and promote economic recovery.

4. CONCLUSION

After the implementation of quantitative easing monetary policy, Japan's economy has produced an obvious effect in improving deflation and stimulating economic growth to a certain extent, but there is no significant change in stimulating credit and financial stability, and the long-term policy effect is not significant. From the practice and effect of Japan's quantitative easing monetary policy for many years, The following points should be considered in China's monetary policy operation:

(1) In the short term, quantitative easing monetary policy can improve social output, prices and employment levels. Therefore, in abnormal times such as economic crisis, the use of quantitative easing monetary policy can alleviate the negative impact of the crisis. At the same time, the quantitative easing monetary policy tool used by Japan and other countries is also worth our in-depth study and reference.

(2) The practice of Japan's quantitative easing monetary policy shows that interest rate plays an important role in the implementation of monetary policy, and a good interest rate is conducive to the long-term healthy development of economy. Therefore, China should further promote the reform of interest rate liberalization, effectively improve the efficiency of resource allocation in China, and realize the good operation of funds.

(3) As an important transmission channel of monetary policy, the effectiveness of credit market directly affects the effect of quantitative easing policy. Therefore, it is particularly important to properly deal with the non-performing assets of China's commercial banks and maintain the healthy operation of the credit market. China should attach importance to the simultaneous development of direct and indirect financing markets, strengthen the macro-control ability of monetary authorities, and improve the effectiveness of monetary policy.

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