A Study of the Impact of Monetary Policies on Financial Crisis

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Abstract: Monetary policy stands as a pivotal instrument for macroeconomic management, pivotal in stabilizing economies, fostering growth, and mitigating inflationary pressures. In the wake of global financial upheavals, the efficacy and adaptability of monetary policy have garnered heightened scrutiny. The United States, boasting the world's largest economy, and the Federal Reserve, a stalwart among central banks, wield profound influence on global financial dynamics via their policy decisions. Each action taken by the Federal Reserve reverberates across borders, profoundly impacting numerous nations. Amidst global financial turmoil, the Federal Reserve's role assumes paramount significance. These crises inflict profound repercussions on both national economies and individual livelihoods. This paper endeavors to delve into the historical influence of United States monetary policy and the Federal Reserve on global financial crises, scrutinizing their interventions and assessing their efficacy. By tracing their impact across different epochs, this study aims to provide insights into the mechanisms through which monetary policy shapes the trajectory of global financial crises, shedding light on avenues for improvement and resilience-building measures.

Keywords: Financial Crisis, Monetary Policy, Federal Reserve

1. Introduction

The global financial crisis, as a "black swan" event in the economic field, is shocking in terms of both its frequency and impact. The monetary policy of the United States is frequently regarded as a significant factor in triggering or worsening these crises, among other contributing factors. As the world's largest economy and reserve currency issuer, adjustments to U.S. monetary policy not only affect its domestic economy but also have far-reaching impacts on the global economy through channels such as exchange rates, capital flows, and international trade. Historically, U.S. monetary policy has repeatedly served as a "weathervane" for global economic fluctuations. From the stagflation of the 1970s to the subprime crisis of 2008, and to the balancing of inflation and unemployment in recent years, every decision made by the Federal Reserve has affected the nerves of the global market. Especially during financial crises, the rapid adjustment and large-scale intervention of U.S. monetary policy often become critical means to stabilize the market and prevent the crisis from spreading.

Exploring the impact of U.S. monetary policy on global financial crises not only helps to deepen the understanding of the mechanism of monetary policy but also provides valuable policy references for countries when responding to global economic risks. Firstly, as a global economic leader, the

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adjustment of U.S. monetary policy often has a demonstrative and leading role. Studying the logic and effects behind its policies can help other countries more scientifically weigh internal and external factors when formulating and adjusting their own monetary policies, avoiding blind following and policy mistakes. Secondly, global financial crises are often accompanied by a collapse of market confidence and difficulties in international cooperation. At this time, the stability and predictability of U.S. monetary policy become particularly important. Through in-depth research on the transparency of its policy formulation and the fairness of the decision-making process, it can provide strong support for enhancing the stability of the global financial market and promoting international cooperation. Finally, with the continuous changes in the global economic landscape, the status of emerging economies in the global economy is rising. Studying the impact of U.S. monetary policy on these countries can help emerging economies better respond to external shocks and maintain their own economic security and financial stability.

2. 1929 Great Depression

The Great Depression of 1929 was a severe global economic recession in the early 1930s. It initially stemmed from the crash of the US stock market and the bursting of the bubble economy, subsequently spreading to capitalist nations worldwide. This crisis has caused a severe blow to the global economy, with soaring unemployment rates and worsening poverty. The government took various measures to respond, but the recovery process was slow and did not truly end until the outbreak of World War II. The Great Depression dealt a devastating blow to the US economy. Industrial production plummeted, unemployment rates skyrocketed, prices collapsed, and banks collapsed one after another. According to statistics, the unemployment rate in the United States reached as high as 25% in 1933, and industrial production declined by nearly 50% compared to 1929. In addition, the Great Depression also led to the collapse of global trade and strained international relations.

In the early stages of the Great Depression, the Federal Reserve adopted a contractionary monetary policy, attempting to stabilize prices and curb stock market speculation by raising interest rates. However, this policy exacerbated the severity of the economic downturn. As the crisis deepened, the Federal Reserve began to shift towards expansionary monetary policy, stimulating economic growth through lowering interest rates and providing liquidity support. However, due to the late and insufficient implementation, these policies failed to fully reverse the economic slump. Specifically, after the stock market crash in 1929, the Federal Reserve did not immediately take action to stabilize the financial markets. Instead, it continued to implement contractionary monetary policy, leading to further tightening of credit markets and severe constraints on business investment and consumption. It was only in 1933 that the Federal Reserve commenced implementing expansionary monetary measures, which included reducing the discount rate and engaging in government bond purchases. These measures partially alleviated the pressure on the banking system and stimulated economic recovery. However, due to the late and insufficient implementation, these policies were unable to fully eliminate the impact of the Great Depression. The idea of financial crisis rescue originates from government intervention theory, and the Keynesian theory that emerged during the Great Depression marked the birth of modern state interventionism. The US financial crisis rescue, in essence, still belongs to Keynesian-style government intervention [1].

The monetary policy of the Federal Reserve during the Great Depression had profound impacts on the economy and society. Firstly, the contractionary monetary policy exacerbated the severity of the economic downturn and prolonged the duration of the depression. Secondly, while the expansionary monetary policy partially alleviated the pressures of the economic slump, it failed to fully reverse the economic downturn due to its late and insufficient implementation. Additionally, the monetary policy of the Federal Reserve also affected its own position and independence. The Great Depression made the U.S. government realize the importance of central banks in stabilizing the economy, leading to a

strengthening of the power and independence of the Federal Reserve. This provided important lessons for future monetary policy formulation.

The contractionary monetary policy of the Federal Reserve in the early stages of the Great Depression was a serious mistake. In times of economic crisis, central banks should adopt expansionary monetary policy to stimulate economic growth and stabilize financial markets. Secondly, the gradual shift towards expansionary monetary policy by the Federal Reserve after recognizing the mistake was a positive change. However, due to its late and insufficient implementation, these policies failed to fully reverse the economic downturn. This highlights the need for central banks to react more swiftly and take more forceful measures to stabilize the economy during financial crises.

The monetary policy during the Great Depression had far-reaching effects on the position and independence of the Federal Reserve itself. This crisis made the U.S. government realize the importance of central banks in stabilizing the economy, leading to a strengthening of the power and independence of the Federal Reserve. This provided important lessons for future monetary policy formulation. When capitalist economies experience a major depression, the trade protection policies implemented by various countries may appear to protect domestic businesses and economies. However, in reality, these policies accelerate the deterioration of the economic situation in capitalist nations [2].

The Great Depression of 1929 brought profound disasters to the U.S. and global economies. While the monetary policy of the Federal Reserve had some role during the crisis, it also had serious mistakes and shortcomings. This crisis provides us with valuable lessons: firstly, central banks need to use monetary policy tools more flexibly to stabilize the economy and support growth during financial crises; secondly, the independence and coordination of central banks need to be strengthened; thirdly, structural issues need to be taken into account to avoid economic crises caused by excessive speculation and income inequality.

3. 1970-1980 Stagflation

Stagflation refers to a period in the US economy during the 1970s to the early 1980s, characterized by a combination of inflation and economic stagnation. The main causes of stagflation were the oil crisis, high inflation rates, and slowed economic growth. The government implemented fiscal and monetary policy measures, including tax cuts and deregulation, to promote economic recovery and reduce inflation. In the face of economic stagnation in the United States, the Federal Reserve has been oscillating between raising and lowering interest rates, lacking policy continuity. After Paul Volcker took office as the Chairman of the Federal Reserve in 1979, he established price stability as the primary monetary policy goal. However, during the implementation process, there were still signs of implementing high-interest rate policies followed by relaxation of interest rate controls [3].

Stagflation had various impacts on the US economy. Firstly, there was a significant decline in the economic growth rate and a continuous rise in unemployment, indicating weakened economic vitality. Secondly, the soaring inflation rate led to a decrease in real wages and diminished consumer purchasing power, further suppressing economic growth. For instance, the Consumer Price Index (CPI) rose from 3.9% in 1970 to 11.0% in 1974 and 9.1% in 1975. Additionally, the annual average GDP growth rate dropped from 4.3% in the 1960s to 2.9% in the 1970s. Unemployment also rose from 4.9% in 1970 to 8.5% in 1975. Moreover, stagflation resulted in financial market volatility and decreased corporate profits, exacerbating economic uncertainty.

In the face of stagflation, the monetary policy of the Federal Reserve underwent significant changes. In the early 1970s, in an effort to stimulate the economy, the Federal Reserve lowered the discount rate from 6.25% in 1970 to 4.75% in 1971. However, as inflation rates soared, the Federal Reserve began to tighten its monetary policy. By 1981, the discount rate had skyrocketed to 14%,

reaching a historical high. The contractionary monetary policy partially restrained further deterioration of inflation. The growth rate of the Consumer Price Index (CPI) gradually declined in the early 1980s, dropping from 13.5% in 1980 to 3.2% in 1983. However, this also led to a severe economic recession and a further increase in the unemployment rate. The GDP growth rate plummeted to -1.8% in 1982, while the unemployment rate reached a high of nearly 10%. Additionally, high interest rates resulted in financial market instability and increased corporate financing costs. Many banks and savings and loan associations faced bankruptcy risks and required government assistance.

4. 2008 Financial Crisis

The genesis of the 2008 financial crisis can be traced back to the subprime mortgage crisis that originated in the United States. In the early 21st century, the booming US real estate market led to rapid growth in the subprime mortgage market. However, as housing prices declined and interest rates rose, a large number of subprime borrowers were unable to repay their loans, resulting in a significant increase in subprime mortgage defaults. These defaulted loans were bundled into financial derivatives and widely circulated in the global financial markets. When the value of these financial derivatives plummeted, the financial institutions holding them found themselves in distress, triggering a chain reaction. The outbreak of the financial crisis was also closely related to the lack of financial regulation in the United States, excessive risk-taking by financial institutions, and the interconnectedness of global financial markets.

The 2008 financial crisis had severe consequences for the US economy. The US economy has entered into a recession, causing significant damage to the banking sector. Credit activities have sharply declined, resulting in a significant reduction in funding support for the real economy [4]. Firstly, the financial markets were severely impacted, with the Dow Jones Industrial Average falling by 33.8% and the S&P 500 index dropping by 38.5% in 2008. Multiple significant financial institutions, including Lehman Brothers and Bear Stearns, either collapsed or underwent acquisitions. The credit market froze, making it difficult for businesses and consumers to obtain loans. Secondly, the real economy suffered a significant blow. The US GDP growth rate plummeted to -8.4% in the fourth quarter of 2008, and the unemployment rate soared from 4.6% in 2007 to 10% in 2009. The real estate market remained depressed, with falling house prices and a significant decline in housing starts. Business and consumer confidence were severely damaged, leading to a sharp decrease in investment and consumer spending. Additionally, the financial crisis triggered a global economic recession. Economic growth slowed down in regions such as Europe and Asia, and unemployment rates rose. Global trade volume decreased, and international financial markets became volatile and unstable.

In the face of the financial crisis, the Federal Reserve implemented a series of unconventional monetary policy measures to stabilize the financial markets and support economic growth. Firstly, the Fed significantly lowered the federal funds rate from 5.25% in 2007 to a range of 0-0.25% by the end of 2008. Secondly, the Fed implemented a quantitative easing policy, injecting liquidity into the market through the purchase of long-term government bonds and mortgage-backed securities. During this quantitative easing program, the Federal Reserve purchased US dollar assets totaling as much as \$1.725 trillion. This includes direct debt related to government-sponsored enterprises (GSEs) such as Fannie Mae and Freddie Mac, as well as federal housing loans and debt related to the real estate sector [5]. Additionally, The Federal Reserve created currency exchange agreements with several prominent central banks to offer assistance in maintaining dollar liquidity. These policy measures to some extent alleviated the tension in the financial markets and restored market confidence. The Dow Jones Industrial Average began to rebound in 2009 and gradually recovered lost ground in the following

years. The credit market also began to thaw, and businesses and consumers started gaining access to loans.

When interest rates are lowered to near-zero levels and there is limited room for further adjustments, traditional monetary policy becomes ineffective. In such situations, unconventional monetary policies, such as quantitative easing, are implemented to stimulate economic recovery. This marks the beginning of an era of quantitative easing in monetary policy [6]. The monetary policy implemented by the Federal Reserve had far-reaching implications for the financial markets and the real economy. Firstly, lowering interest rates and providing liquidity support helped stabilize the financial markets and prevent further deterioration of the financial crisis. Secondly, the quantitative easing policy pushed down long-term interest rates, reducing borrowing costs for businesses and consumers, stimulating investment and consumer spending. Additionally, currency swap arrangements with other central banks helped alleviate global dollar liquidity tensions. However, the Fed's monetary policy also brought some negative consequences. Firstly, prolonged low interest rates could lead to asset price bubbles and excessive risk-taking. Secondly, quantitative easing policies could result in inflationary pressures and currency depreciation. Moreover, currency swap arrangements could exacerbate global currency competition and exchange rate fluctuations.

Overall, the Federal Reserve took decisive and effective policy measures in response to the 2008 financial crisis. Through lowering interest rates, providing liquidity support, and implementing quantitative easing policies, the Fed successfully stabilized the financial markets and supported economic growth. These policy measures to some extent mitigated the impact of the financial crisis and laid the foundation for global economic recovery. However, the Fed's monetary policy also faced some challenges and issues. Firstly, the transmission mechanism of monetary policy was disrupted during the crisis, limiting the effectiveness of the policies. Secondly, the timing and manner of policy exit need to be carefully managed to avoid creating new shocks to the economy and financial markets. Additionally, the Fed needs to strengthen policy coordination and communication with other major central banks to maintain global financial stability.

5. COVID-19 Crisis

In early 2020, the COVID-19 pandemic rapidly spread globally, leading to a significant reduction in economic activity in countries around the world. The United States, as the largest economy globally, was not spared from the impact. The pandemic-induced lockdown measures, decreased consumer spending, and business bankruptcies quickly triggered a financial crisis. To control the spread of the virus, the US government implemented widespread lockdown measures, resulting in the shutdown of non-essential industries and a large number of layoffs or bankruptcies of businesses. Consumer confidence was severely hit, leading to a sharp decline in consumer spending. Furthermore, disruptions in the global supply chain exacerbated the economic challenges in the United States. From March to April 2020, the US unemployment rate soared from 4.4% to 14.7%, reaching the highest level since World War II. Simultaneously, the Dow Jones Industrial Average plummeted over 30% within a month, entering a technical bear market. Additionally, numerous businesses, particularly those that are small and medium-sized, encountered the peril of disrupted cash flow.

The financial crisis triggered by the COVID-19 pandemic has brought various negative impacts to the US economy. The financial markets have been volatile, with stock market crashes and increased bond market fluctuations, severely undermining investor confidence. The real economy has suffered, with business closures, rising unemployment rates, and a significant decrease in consumer purchasing power. The credit market has tightened, as banks and other financial institutions have tightened credit to mitigate risks, further exacerbating the challenges faced by businesses and consumers. Data shows that in the second quarter of 2020, US GDP plummeted at an annualized rate of 31.4%, marking the

largest decline in history. Additionally, by the end of 2020, over 100,000 small businesses had permanently closed.

The IMF's 2023 working report highlights that the Federal Reserve has implemented an unprecedented accommodative monetary policy in response to the economic downturn caused by the COVID-19 pandemic [7]. To address the financial crisis, the Federal Reserve swiftly lowered the target range for the federal funds rate to 0-0.25% to reduce borrowing costs. The Federal Reserve also announced the implementation of unlimited asset purchase programs, including government bonds and mortgage-backed securities, to provide liquidity support. Additionally, various new liquidity support facilities were established, such as the Main Street Lending Program and the Money Market Mutual Fund Liquidity Facility, to stabilize the financial markets and support the flow of credit to the real economy. These policy measures have to some extent alleviated the tension in the financial markets and restored market confidence. For example, after hitting a bottom in March 2020, the Dow Jones Industrial Average gradually rebounded in the following months.

The monetary policy of the Federal Reserve has played a crucial role in addressing the financial crisis triggered by the COVID-19 pandemic. By lowering interest rates and providing liquidity support, the Federal Reserve successfully averted a complete collapse of the financial markets. The new monetary policy tools helped restore the functioning of the credit market and supported the financing needs of businesses and consumers. While monetary policy cannot fully offset the impact of the pandemic on the economy, it has to some extent slowed down the speed and depth of the economic downturn. However, the Federal Reserve's monetary policy also brings some potential risks, such as the possibility of asset price bubbles and excessive risk-taking due to long-term low interest rates. The implementation of quantitative easing by the Federal Reserve has to some extent boosted consumer confidence and stimulated investment behavior. At the same time, the rise in the US stock market has led to asset bubble formation. This bubble has the potential to burst at any time [8].

Overall, the Federal Reserve has demonstrated a high degree of flexibility and innovation in addressing the financial crisis caused by the COVID-19 pandemic. By swiftly lowering interest rates, implementing unlimited quantitative easing, and creating new monetary policy tools, the Federal Reserve successfully stabilized the financial markets and supported the flow of credit to the real economy. These policy measures have laid the foundation for the recovery of the U.S. economy. However, the Federal Reserve's monetary policy also faces some challenges and limitations. Firstly, the transmission mechanism of monetary policy may be disrupted during the crisis, and the policy effects may not be as expected. Secondly, long-term low interest rates and the injection of a large amount of liquidity may lead to rising inflation and asset price bubbles [9]. Tight monetary policy can have a significant impact on financial markets [10]. Finally, the Federal Reserve needs to carefully manage the timing and manner of exiting its monetary policy to avoid causing new shocks to the economy and the financial markets.

6. Conclusion

Through the analysis of monetary policy in different historical periods in the United States and the Federal Reserve, it can be seen that monetary policy plays a crucial role in addressing financial crises. However, due to the constantly changing economic environment and financial conditions, monetary policy also needs to be continuously adjusted and improved. During financial market turmoil and economic recession, the Federal Reserve's structural monetary policy has shown clear effectiveness in restoring financial market stability and promoting recovery and growth. However, there are still obstacles in addressing liquidity traps, and conflicts with aggregate monetary policy persist. During times of financial crisis, central banks need to use monetary policy tools more flexibly to stabilize the economy and support growth. At the same time, attention should be paid to the international impact

of monetary policy and its coordination with other macroeconomic policies. Although the Federal Reserve has taken certain monetary policy measures to stabilize the economy and support growth during past financial crises, these policies also face challenges and issues. Firstly, there is a certain time lag in the formulation and implementation of monetary policy, which may not be able to respond promptly to the impact of financial crises. Secondly, monetary policy has limitations in addressing structural issues and needs to be coordinated with other macroeconomic policies. Finally, long-term implementation of expansionary monetary policy may bring about risks such as inflation, asset price bubbles, and financial market instability. Therefore, in future monetary policy formulation, it is necessary to pay more attention to economic restructuring, coordination with fiscal policy, and the stable development of financial markets.

References

- [1] Chen, Q. (2012). Research on the Fed's Financial Crisis Relief, Jilin University.
- [2] Chen, L. (2018). Research on the Monetary Policy of the Federal Reserve since the Global Financial Crisis, Jilin University.
- [3] Sheng, L., & Zheng, K. (2020). How to View the Current COVID-19 Crisis A Comparative Analysis of International Economic and Financial Crises in the Past Century. International Finance, (07), 33-40.
- [4] Liu, W. (2015). Research on the Adjustment and Impact of U.S. Monetary Policy in the Post-Financial Crisis Era, Wuhan University.
- [5] Huang, Y. (2014). The Changing Federal Reserve A Study on the Monetary Policy Operations of the Federal Reserve since the Global Financial Crisis, Graduate School of Chinese Academy of Social Sciences.
- [6] Chen, T. (2022). Research on the Impact of U.S. Monetary Policy Adjustment on its Stock Market, Jilin University.
 [7] Global Financial Stability Report. (2022). IMF. https://www.imf.org/en/Publications/GFSR
- [7] Global Phanelal Stability Report. (2022). IMP: https://www.imp.org/en/1 doiteditions/GPSR
 [8] Yuan, J. (2023). The Impact of U.S. Quantitative Easing Monetary Policy on Asset Price Fluctuations, Liaoning University.
- [9] Lu, X. (2023). Research on the Structural Monetary Policy of the Federal Reserve. China Foreign Exchange, (19), 40-44.
- [10] Li, Z. (2020). Analyzing the Relationship between Monetary Policy and the Causes of Financial Crises from the Perspective of U.S. Financial Crisis History. China Circulation Economy, (26), 158-161.