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The Impact of Monetary Policies on the U.S. Financial Crisis

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Abstract: This paper examines the role of monetary policy in addressing economic crises by analyzing four significant events in U.S. history: Great depression, stagflation in 1970-198, the 2008 financial crisis and the COVID-19. The monetary policy in the country's economic management has been highlighted in order to resist the decline in financial activity, inflation, large-scale unemployment, and economic recession. History evaluation of policy responses and the results can be employed to assess the efficacy of monetary measures, such as quantitative easing and interest rate adjustments, in achieving financial stability and economic recovery. Nevertheless, this paper points out that it is paramount for the monetary policy adjustment to different economic conditions, and stresses that financial supervision should have the power to avoid speculative activities and guarantee the stability of financial system. The outcomes contribute to deeper knowledge of monetary policy as a tool in managing the crises and provide valuable insights for the policymakers for strategy formulation in future challenges.

Keywords: Monetary Policies, Financial Crisis, COVID-19 Pandemic

1. Introduction

As societies evolve, the economic systems become increasingly complex, leading to recurrent financial crises that pose significant challenges to economic stability and growth. From the Great Depression of 1929 to the stagflation of the 1970s-1980s, the 2008 financial crisis, and the recent COVID-19 pandemic, each crisis has profoundly affected the U.S. economy. By adjusting the money supply and interest rates, monetary policy can not only mitigate the damage caused by the financial crisis, but also promote the rapid recovery of the economic system [1]. Strategic monetary policies help to create a stable economic environment with positive growth prospects, according to Bernanke's paper, and Krugman's paper [2, 3]. Such scholars have noted that the unconventional monetary policy tools, such as Quantitative Easing (QE), have indeed showed significant efficacy in terms of stability in financial markets and faster economic recovery in times of recession. Nevertheless, the adaptation of these policies has some limitations, and suitability depends on their viability in various economic conditions. In-depth study of monetary policy applied in different economies' crises situation not only helps the United States better grasp of the economic management in challenging times, but also helps it establish a framework for future formulation of such policy. This research investigates the effect of the major United States economy falls and evaluates the efficacy of monetary policy tools that were implemented during those crises, with a special emphasis on the policy formulation adaptability and financial supervision robustness as keys to future crisis prevention.

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2. 1929 Great Depression

The Great Depression of 1929, when the U.S. stock market crash led to the biggest economic calamity in the world, is one of the worst financial crisis recorded in history. The causes of the recession were varied, not least the economic boom in the United States after World War I, which fueled rampant speculation and caused stock prices to soar [4]. However, after the war, global demand fell sharply, leading to overproduction in many industries. Companies, in an attempt to mitigate losses, initiated selloffs, leading to a significant drop in stock prices. This crash prompted a mass withdrawal of deposits from banks, leading to numerous bank failures [4]. The crisis wiped out billions of dollars, severely impacting the U.S. economy. By 1933, the U.S. GDP had shrunk by over 36%, with unemployment rates soaring to 25%. The Dow Jones Industrial Average experienced a dramatic decline, dropping from a high of 381.17 to a low of 41.22 points, marking an 89.2% decrease [5]. Additionally, the imposition of tariffs on imported goods by various countries led to a 66% reduction in global trade.

Between October 1929 and October 1931, the Federal Reserve gradually lowered the discount rate from 6% to 3%. However, after October 1931, in order to prevent the outflow of gold, the Federal Reserve raised the discount rate to 4% [6]. This led to a significant increase in domestic bank failures and runs in the United States, aggravating the economic crisis [6]. In the nearly four years since then, the U.S. economy has been hovering at a low point, forming the Great Depression period in world economic history.

In 1933, Roosevelt came to power and launched a series of active rescue measures based on Keynesian monetary policy. Keynesian monetary policy is an economic policy in which the central bank affects interest rates by changing the money supply, and then affects aggregate demand and national income through interest rates [7]. Under the influence of this theory, on the one hand, the Roosevelt administration implemented loose monetary policies to provide credit to the market, such as issuing $3 billion in banknotes to ease liquidity tensions in the market [7]. This move caused the U.S. dollar to depreciate by 40.94%, thereby significantly increasing the export of U.S. goods, lowering real interest rates, and increasing public enthusiasm for investment. At the same time, financial institutions established regulatory systems and passed the Banking Act of 1935, Federal Debt Act and Gold Reserve Act [6]. Pass legislation to require commercial banks and other financial institutions to strengthen their own behavioral norms and eliminate unhealthy banks with no repayment capacity. By rebuilding the bank's credit, the market gradually recovered at that time. In addition, the U.S. government also abolished the gold standard, established the Federal Deposit Insurance Corporation, established the Securities Oversight Commission, and concentrated the management of currency and credit in the hands of the government through a series of means [6].

Monetary policy during Roosevelt's New Deal effectively coordinated fiscal policy. In the context of this economic crisis, strong monetary policy injected vitality into the market in the shortest possible time and helped the U.S. economy embark on the road to recovery. By 1939, U.S. consumption levels had increased by 4.8% from the bottom in 1933, and investment had increased significantly from $21.8 trillion to $49 trillion (Meltzer, 2010). The economy as a whole shows a state of recovery with active investment and stable prices. Monetary policy played a certain role during this great crisis.

3. 1970-1980 Stagflation

Stagflation is characterized by falling GDP coupled with high inflation levels. There were three rounds of severe stagflation that occurred in the United States between the years 1970 and 1980. During these periods, economic growth slowed down, high unemployment and high inflation coexisted, and the Phillips Curve failed to achieve its intended purpose. The inflation rate has reached more than 15%, and the unemployment rate has increased from below 4% to nearly 9% [8]. This is occurring against the backdrop of the skyrocketing prices of gold and oil which have been observed in recent years. During this time period, severe stagflation was the cause of turmoil in the financial markets, a reduction in the prices of stocks on the stock market, and social unrest in the United States.

According to the new liberalism, the emergence of stagflation can be primarily attributed to the implementation of Keynesian monetary policy over multiple years. In the 1960s, President John F. Kennedy promoted Keynesianism and implemented deficit fiscal policies. By continuously expanding government spending, the US government attempted to stimulate economic growth and increase employment [9]. As a result of the massive issuance of treasury bonds by the government, the Federal Reserve accelerated the rate of growth of the money supply in order to forestall an increase in the interest rates that are currently being charged on the market. M1 experienced a rapid increase in growth rate, going from a negative 0.05% in 1960 to a positive 7.02% in 1968 [9]. Johnson and his legislative initiative, which came to be known as the Great Society, were responsible for the continued increase in prices while simultaneously promoting the rapid improvement of social welfare levels. The rate of inflation reached its highest level since 1951 in 1969, when it reached 5% [10]. This was a result of expansionary fiscal policy and loose monetary policy, which stimulated the rate of inflation.

With price controls and wage freezes imposed during the Nixon years, inflation began to turn back into stagflation. In 1971, Nixon adopted the New Economic Policy to control prices, implemented wage and price controls, and stopped using gold to pay US dollars. After price controls were lifted in 1973, the inflation rate rebounded with retaliation to 6.2%, the unemployment rate remained at a high level of 4.9%, and the stagflation situation was basically finalized [8]. In addition, due to over-reliance on oil, the U.S. economy suffered greatly during the two oil crises in the 1970s.

During that period, the U.S. government experienced repeated failures and attempts to control inflation. Although Presidents Ford and Carter took a series of policy measures in an attempt to lower inflation and restore economic growth, the economy did not get out of the stagflation dilemma. Until 1979, Paul Volcker took office as Chairman of the Federal Reserve, establishing the Federal Reserve's primary monetary policy goal of price stability [11]. He gave up the active monetary policy intervention since the Roosevelt administration and switched to monetarist single rule. The core idea of this rule is to achieve stable monetary policy by adjusting interest rates, rather than trying to achieve this goal by adjusting the money supply [11]. Volcker lowered the money supply growth rate and raised the federal funds rate to 17%. By 1984, the inflation rate in the United States had dropped to 3.8%, and price levels returned to normal [11]. The single rule allows the money supply to grow in an orderly manner along with the growth of potential output, which not only meets the market's demand for liquidity but also effectively suppresses inflation. Decreasing inflation levels have prompted U.S. real interest rates to further rise, attracting inflows of foreign investment funds and causing a strengthening of the U.S. dollar.

4. 2008 Financial Crisis

The culprit that triggered the financial crisis in 2008 was subprime mortgage. During this period, the real estate boom spurred financial innovation in the subprime mortgage industry. Due to the uneven qualifications of home lenders and the wide gap in creditworthiness, real estate mortgage loans in the United States are divided into prime mortgage loans, mortgage loans and subprime mortgage loans according to their credit ratings from high to low [12]. In order to increase financing channels in the capital market, lending companies package the loans they hold with different credit ratings into proportions for securitization, design subprime mortgage loans into collateralized debt obligations, and use credit default swaps to insure the bonds. The securitization of real estate mortgage loans diversified the risks concentrated in loan companies. The crisis from the real estate market ultimately spread to the entire financial sector of the United States.

In the subprime mortgage crisis in the real estate industry, nearly 2.2 million debtors lost their assets due to rising mortgage interest rates. The real estate market was severely hit, and stock prices plummeted by 60% [13]. The subprime mortgage industry involves financial institutions such as banks, credit unions, mortgage companies, rating agencies, and investment banks. The collapse of the subprime mortgage industry directly caused the collapse of the U.S. financial industry. Subprime loans held by mortgage companies instantly turned into junk. From July to September 2007, more than 20 mortgage companies declared bankruptcy in just two months [13]. The collapse of the real estate industry severely damaged investment confidence in the market, and the economy quickly fell into crisis.

Since commercial banks are extremely cautious about rediscount financing, the Federal Reserve established The Term Auction Facility (TAF) in order to encourage commercial banks to actively lend. By lending to commercial banks through auctions, TAF has provided loans of $160 billion to banks in six installments [14]. In addition to commercial banks, the Federal Reserve has also designed an auction tool for primary dealers - the short-term securities lending facility, which reduces financial institutions' own risks by exchanging high-risk mortgage-backed securities held by financial institutions and provides them with up to 2,000 billion dollar loan [13]. Coupled with the substantial easing of monetary policies in various countries, gave birth to an 11-year bull market in the U.S. stock market [13]. Various types of leveraged funds have joined in, and U.S. companies have also issued bonds to repurchase stocks, pushing U.S. stocks to frequent record highs.

5. COVID-19 Crisis

The pandemic has been an unexpected and major stimulus to the U.S. economy. Countries have incrementally implemented measures of isolation and blockade between the years 2019 and 2022. Consequently, this has resulted in the possibility of disruptions to supply chains around the world, and investors are preparing themselves for an increased likelihood of a recession in the global economy [15]. Meanwhile, Saudi Arabia and Russia are currently engaged in a price war for crude oil, and both the stock market in the United States and the price of oil have dropped significantly, which has increased the likelihood of a financial crisis. For the United States, more than a decade of ultra-loose monetary policy has led to inflation in different areas. Scholars have been worried and concerned about this potential risk because it may develop into a systemic risk or even trigger a crisis under the influence of specific factors [15]. ROFCI is a financial crisis risk index that comprehensively reflects the overall risk status of the U.S. financial market. It rose to 68 in 2020, rapidly entering the danger zone from the safe zone [16].

Money market funds rose during the early stages of the pandemic, from $2.26 trillion at the start of March 2020 to $2.77 trillion at the end of the same month [17]. This exceeds the peak of the financial crisis in 2008. Supply chain disruptions create cash flow difficulties for businesses, increasing their need for short-term funding. In addition, corporate cash constraints and a freeze in the commercial paper market have led to a sharp rise in borrowing costs. In early March 2020, the spread between A2/P2 and AA, which reflects the risk status of the commercial paper market, was quickly approaching the 1% danger zone. Mass unemployment is also the most obvious manifestation of this economic crisis. In February 2020, the U.S. unemployment rate was 3.5%, but this number soared to 14.7% in April [18]. Four in 10 U.S. adults say that if there was an emergency expense of $400, they would have to borrow money, sell something, or be unable to pay it [19].

The Federal Reserve has adopted unprecedented large-scale easing to deal with the economic impact of the pandemic. In March 2020, it quickly reduced the federal funds rate to a range of 0% to 0.25% by lowering the federal funds target rate by 1.5 percentage points in two steps [16]. A large-scale, unconventional quantitative easing (QE) program was put into place. The Federal Reserve conducted three rounds of quantitative easing (QE) over a four-year period, totaling $3.925 billion, during the subprime mortgage crisis. In less than two weeks during this crisis, QE was expanded from $700 billion to an unlimited amount. Financial institutions use the Commercial Paper Financing Facility (CPFF), the Money Market Mutual Fund Liquidity Facility (MMLF), and the Primary Dealer Credit Facility (PDCF) to supply liquidity [16]. Simultaneously, to facilitate redemptions from money market fund investors, the Treasury Department supplied $10 billion in initial equity [16]. The zero interest rate and unlimited QE policy combination contributed to the substantial recovery in the U.S. stock market. By April 30, 2020, the Dow was back up to 24,346, an 11% rebound for the month. It has narrowed its decline from its all-time high to 18% and is up 31% from its lows in March 2020. In addition, the Federal Reserve provided an additional $2.3 trillion in rescue plans to provide financing to U.S. state and county governments and provide liquidity facilities for bank credit to businesses and consumers, preventing the liquidity crisis from turning into a debt crisis.

6. Discussion

Since the emergence of Keynesian macroeconomics, monetary policy has become an important means used by governments to regulate the economic cycle. However, the effectiveness of the countercyclical effect of monetary policy has always been a focus of debate among major economic schools in the theoretical community. The Keynesian school is an active advocate of monetary policy. They believe that monetary policy can adjust and improve insufficient effective demand, stabilize the economic cycle, and promote stable economic growth [7]. The government should proactively use this policy to regulate and intervene in the macroeconomy. Nevertheless, new liberalism strongly opposes Keynesian claims, believing that Keynes's monetary policy will disrupt the economy and cause a new economic cycle [20]. In the long run, whether it is Keynesian or new liberalism monetary policy, if left unchecked, it may cause price level fluctuations and bring about the pressure of an economic crisis.

When faced with the enormous impact of the crisis on the economy, the US government at different times tends to choose to adopt a loose monetary policy. These measures, like interest rate cuts and launching large-scale asset purchase plans, are expected to encourage financial institutions to increase financial support for real enterprises and promote the devaluation of the national currency to stimulate exports [1]. However, based on historical experience, if monetary policy is too loose or remains loose for too long, it may become a breeding ground for the next round of crisis. For example, after the Internet bubble crisis in 2000, the Federal Reserve continued to cut interest rates and maintained low interest rates for a long time, which stimulated the expansion of the U.S. real estate bubble. Subsequently, the Federal Reserve raised interest rates 17 times to control inflation, causing the asset bubble to burst and triggering the subprime mortgage crisis [11]. In order to solve the subprime mortgage crisis, zero interest rates and three rounds of QE gave birth to a bull market in the US stock market for more than ten years. But in 2020, affected by the pandemic, the huge bubble in the stock market burst, and US stocks fell sharply.

When expansionary or contractionary monetary policy is implemented, the difference between monetary system and currency circulation velocity cannot be ignored. On the one hand, the monetary system in different periods determines what type of monetary policy is appropriate. During the Great Depression, the gold standard was mainly implemented, which limited the central bank's currency issuance and policy flexibility. In contrast, considering that it is now a floating exchange rate system, the central bank can release a large amount of liquidity as needed [1]. For example, the Federal Reserve can launch unlimited QE to provide financing facilities for financial institutions, businesses and consumers and stabilize financial markets. On the other hand, only by considering both the quantity of money and the velocity of circulation and grasping these two dimensions can monetary policy truly be effective. However, the velocity of currency circulation is difficult for any country’s central bank to accurately calculate and can only be roughly judged based on predictions of the

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economic situation [1]. In other words, the particularity of currency circulation requires the Federal Reserve to maintain keen insight and analytical capabilities.

It is urgent to strengthen supervision of the monetary and financial systems. Ineffective monetary policy has caused monetary funds to flow into the virtual economy, triggering stock market fluctuations, high housing prices, and the popularity of financial innovation. These all reflect the need for further improvement in the supervision of the U.S. monetary and financial system. Every economic crisis inevitably begins with a financial crisis. Financial innovation often leads to the rapid expansion of fictitious capital, and capital flows into the financial market. Repeated innovation of financial instruments leads to self-proliferation and eventually breaks away from the real economy. However, the speed of financial supervision is far behind financial innovation. The Federal Reserve should effectively guide the flow of monetary funds, strengthen supervision of innovative financial products, and adhere to the purpose of monetary and financial services serving the real economy.

7. Conclusion

Overall, this study highlights the crucial role of monetary policy in responding crises in the economics throughout the history. Through studying the Great Depression, stagflation, the 2008 financial crisis, and the pandemic recessions, a diversity in the economic consequences of these crises and the corresponding monetary policies put in place to tackle them has been seen. The success of these measures including quantitative easing and interest rate adjustments has been proven to play a vital role in restoring financial market stability and helping economic recovery. Though the study underlines the need for adaptability in the conduct of monetary policy as well as the demand for financial regulation that discourages financial bubbles and guarantees the stability of financial systems. Monetary policy decision makers should remain vigilant and flexible in their approach, while analyzing changing economic conditions and implementing measures that are the most beneficial for the real economy, but also guaranteeing the protection against future crises.

References

[1] *Bernanke, S. (2020). The new tools of monetary policy. American Economic Review, 110(4), 943-983.*

[2] *Bernanke, C. (2009). The Crisis and the Policy Response. Federal Reserve Board. https://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm*

[3] *Krugman, P. (1999). Depression economics returns. Foreign Affairs, 78(1), 56-74.*

[4] *Matés-Barco, J. M. (2023). The Great Depression of 1929: crisis in the world economy. In The Age of Global Economic Crises (pp. 1-37). Routledge.*

[5] *Kramer, L. (2023). The Stock Market Crash of 1929 and the Great Depression. Investopedia. Retrieved from https://www.investopedia.com/ask/answers/042115/what-caused-stock-market-crash-1929-preceded-great-depression.asp*

[6] *Meltzer, A. H. (2010). A history of the Federal Reserve, Volume 1: 1913-1951. University of Chicago Press.*

[7] *Galí, J. (2015). Monetary policy, inflation, and the business cycle: an introduction to the new Keynesian framework and its applications. Princeton University Press.*

[8] *Goutsmedt, A. (2021). From the Stagflation to the Great Inflation: Explaining the US Economy of the 1970s. Revue d'economie politique, 131(3), 557-582.*

[9] *Campbell, D. E., & Lu, H. F. (2009). The emergy to money ratio of the United States from 1900 to 2007. Emergy Synthesis, 5, 413-448.*

[10] *Milkis, S. (2012). How Great Was the Great Society. Mitchell B. Lerner (Hg.), A Companion to Lyndon B. Johnson. Malden: Wiley-Blackwell, 469-486.*

[11] *Persaud, A. (2010). The locus of financial regulation: home versus host. International Affairs, 86(3), 637-646.*

[12] *Sanders, A. (2008). The subprime crisis and its role in the financial crisis. Journal of Housing Economics, 17(4), 254-261.*

[13] *Erkens, D. H., Hung, M., & Matos, P. (2012). Corporate governance in the 2007–2008 financial crisis: Evidence from financial institutions worldwide. Journal of corporate finance, 18(2), 389-411.*

DOI: 10.54254/2754-1169/83/20240761

[14] *Benmelech, E. (2012). An empirical analysis of the Fed's Term Auction Facility (No. w18304). National Bureau of Economic Research.*
[15] *Saunders, A, et al. (2021). Financial Markets and Institutions. In McGraw Hill.*
[16] *Schrimpf, A, et al. (2020). Leverage and margin spirals in fixed income markets during the Covid-19 crisis. In BIS Bulletin.*
[17] *Goyal, N., & Howlett, M. (2021). "Measuring the Mix" of Policy Responses to COVID-19: Comparative Policy Analysis Using Topic Modelling. Journal of Comparative Policy Analysis: Research and Practice, 23, 250 - 261.*
[18] *Leiserson, G. (2023). "The coronavirus decline highlights the importance of mechanical holders." Equitableexpansion. Retrieved from equitableexpansion.org/the-coronavirus-decline-highlights-the-importance-of-mechanical-holders/.*
[19] *Boushey, H., & Somin, P. (2020). "The coronavirus decline and commercial inequality: A roadmap to recovery and long-term constructional change." Equitableexpansion, equitableexpansion.org/the-coronavirus-decline-and-commercial-inequality-a-roadmap-to-recovery-and-long-term-constructional-change/*
[20] *Patomäki, H. (2009). Neoliberalism and the global financial crisis. New Political Science, 31(4), 431-442.*