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Balancing Monetary Supply: The Role of Interest Rate Hikes and Cuts in Combating Inflation

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Abstract: With the frequent occurrence of social emergencies, inflation has become a worldwide concern. To solve this problem, the article analyzed the influence of the policy of raising and lowering interest rates. The most important thing is finding the best method to reduce the inflation problem. The article selected and analyzed the impact of two monetary policies on domestic and foreign countries, and it was supported by Keynesian theory and Fisher's equation. The result showed whether hiking or cutting interest rates alone influences the economy. To maintain the stability of the money supply, it is necessary to alternate interest rate hikes and interest rate cuts to ensure the balance of the money supply. The method is significant to maintain the healthy development of the global economy, As the economic landscape continues to evolve in complexity, ongoing research and adaptive policymaking will prove indispensable in navigating these challenges effectively and continued exploration and refinement of these strategies also will be key to fostering resilient global economies.

Keywords: Inflation, Interest rate hike, Interest rate cut.

1. Introduction

Today's society is in a state of flux, especially since the outbreak of COVID-19 in 2020, global trade has been disrupted, supply chains have suffered serious problems, and energy prices have continued to rise. In this background, He's research points out that the economy will enter a state of hyperinflation when the cumulative inflation rate exceeds 100% for three consecutive years. Under the influence of hyperinflation, the order of market transactions will fall into chaos, the public will lose confidence in the future, and the consumption demand will rise sharply, but the savings of consumers and the investment of producers will almost stop, which will aggravate the economic instability and bring more far-reaching negative effects [1].To solve this problem, each country set up the stimulate fiscal policy and monetary policy, and then the inflation dramatically rises. Inflation not only influences the consumption of consumers but also influences the investment of producers. Besides, to maintain the equity of consumers and producers, each country accords the economic phenomenon to set up relevant monetary policy to solve the challenge. General Secretary Xi Jinping pointed out at the first phase of the 17th G20 Leaders' Summit that "we must curb global inflation, resolve systemic economic and financial risks, especially in developed economies, reduce the negative spillover effects of monetary policy adjustments, and stabilize debt at a sustainable level" [2].

This research will explore the impact of interest rate hikes and interest rate cuts on the economy, by using Keynesian economic theory and Fisher equation. Keynesian doctrine shows that monetary policy impacts the economic flow by influencing the aggregate demand. Hiking the interest rate reduces investment and consumption, then lowers economic growth. Lowering the interest rate stimulates the demand and then promotes economic growth. Besides, the Fisher equation shows the relationship between the interest rate, money supply, and inflation. Hiking the interest rate may restrain inflation by reducing the money supply. Cutting the interest rate may stimulate the price of goods increases. Research on this issue has important implications for understanding the effects of monetary policy and its impact on the global economy, especially on this economic phenomenon. How to maintain the stability of the economy by using monetary policy becomes an important issue in global economic development.

2. The impact of Interest rate hiking

Hiking the interest rate is one of the monetary policy. The main object is preventing the economy from overheating and causing inflation [3]. When implementing the policy of hiking interest rates, the interest rate of saving and borrowing increases. The cost of firms borrowing money from banks increases, and then the investment decreases. At the same time, consumers are willing to save money for the bank, their consumption will decrease. Then the economic growth rate decreases, and the circular flow is slower than before. The supply and demand re-balance, the price level will not change easily, then the pressure of inflation recedes. Besides government can increase the savings of consumers by hiking interest rates, then decrease the money supply. It may decrease the circular flow of the market, then the demand dramatically decreases in the short term. However, there are some disadvantages to this policy. From the domestic side, raising rates too far could send the economy into a vicious circle. When consumption and investment decrease for the first time, the economic growth slows. At the same time, the liquidity of capital will decrease, then the demand of consumers decrease. To cut losses, the firm reduces production, and then the demand for the labor force decreases. When unemployment increases, disposable income decreases, consumption will also fall further, and prices will also fall, potentially leading to deflation. Moreover, hiking the interest rate increases the debt pressure of the government, this affects the allocation of government financial resources. Lian's research on Japan has mentioned that due to the scandal exposure of well-known Japanese companies and the declining competitiveness of the manufacturing industry, Japan's export demand has decreased and import demand has increased, and the trade deficit has been recorded for the third consecutive month as of September last year. In this situation, excessive appreciation of the yen will further reduce the competitiveness of exports. At the same time, the cost of government debt is also under great pressure. At the end of June last year, Japan's total government debt stood at Y1,311.421 trillion. Under this huge debt, raising interest rates will further increase the Japanese government's interest expenses, thereby reducing the allocation of fiscal resources in other areas [4].

Hiking interest rates also influences other countries. Tian et al.'s research shows that rate-hike cycles have negative effects on other countries in at least two ways. First of all, the interest rate hike will lead to the devaluation of other countries' currencies, which will aggravate the sovereign debt problems of various countries [5]. The second is the problem of capital outflows and imported inflation for other countries. At the same time, it is mentioned in Liao's research that in the case of continuous and substantial interest rate hikes, the risks of several major banking industries in the world have increased sharply, the global monetary liquidity has slowed down, the debt default risk of various economies has increased, and the negative impact and potential risks of tightening financial environment have accumulated continuously, and finally, the economic growth has further slowed down [6].

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3. The impact of Interest rate cutting

Interest rate cuts are a form of monetary easing. When implementing the policy of cutting interest rates, the interest rate of borrowing and saving decreases [7]. The cost of firms borrowing money from banks decreases, and they become more willing to invest. At the same time, consumers are eager to consume and do not want to save money in the bank, the consumption will increase. When investment and consumption increase, the economic growth rate increases, then the rate of circular flow increases, and the economy grows at the same time. However, cutting rates too far could lead consumers to overspend. The supply of products can not follow the dramatic increase in demand, the price level will dramatically increase, causing inflation. For example, Argentina tried to cut interest rates several times in the 2010s, they wanted to stimulate the economy by cutting interest rates to increase investment and consumption. However these methods are not efficient in increasing the economy, and they increase inflation.

On the other hand, repeated interest rate cuts have also led to the devaluation of the Argentine peso, and the price of imports increased, dramatically increasing inflation. In 2018s, the year inflation of Argentina was more than 40%, and the cost of living dramatically increased. At the same time, foreign capital in Argentina is flowing out, which is once again exacerbating the country's economic woes. Besides, cutting interest rates will have a negative effect in special situations. Zhang's research mentioned that the Federal Reserve has cut interest rates for the third time in a row since September this year, and announced a 25 basis point reduction in the benchmark interest rate in the early morning of December 19, Beijing time last year, from 4.25% to 4.50%, a cumulative cut of 100 basis points. After the announcement of the Fed's decision, spot gold prices fell sharply, falling below $2,600 per ounce for the first time since November 18, with a daily decline of more than 2% [8]. This concludes that cutting interest rates can promote economic development by helping the price of gold increase at the time. There is a negative effect after the interest rate of the Federal Reserve. Zhang shows the reason in the study, due to the overall hawkish stance of the Fed, the dot plot implies that the number of future rate cuts is still lower than the market expects, and the market believes that the US economy will remain resilient. These factors led to a sharp rise in the interest rate of the US dollar, contrary to the initial target, and finally put pressure on the price of gold to fall [8].

4. Properly formulating monetary policy

In conclusion, whether hiking or cutting interest rates alone influences the economy. To maintain the stability of the money supply, it is necessary to alternate interest rate hikes and interest rate cuts to ensure the balance of the money supply. At the same time the government according to the law of economy makes sound monetary policies to maintain the stability of economic development.

Keynesian economics, formulated by British economist John Maynard Keynes during the Great Depression of the 1930s, underpins much of the modern understanding of economic policy [9]. In his seminal work, The General Theory of Employment, Interest, and Money, Keynes argued that market economies are not always self-regulating and may require government intervention to prevent economic downturns. Keynes posited that during times of economic contraction, the government should actively intervene through fiscal and monetary policies to stimulate aggregate demand and promote full employment. This view challenges the classical economic theory that markets will naturally find equilibrium without government intervention. According to Keynes, especially during periods of recession or depression, government spending is crucial for fostering economic recovery and stabilizing the economy.

In periods of inflation or when the economy is overheating, Keynesian theory supports the use of interest rate hikes as a means to curb excessive demand. By increasing interest rates, the cost of borrowing rises, which leads to a reduction in consumer spending and business investments,

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ultimately cooling down the economy and controlling inflation. This process reduces aggregate demand, which, in turn, stabilizes prices. Conversely, during periods of recession, when businesses and consumers hold back from spending, the government can use interest rate cuts to stimulate demand. By lowering interest rates, borrowing becomes cheaper, encouraging both businesses to invest and consumers to spend, thus fostering economic recovery and growth. Additionally, the government may complement interest rate cuts with direct fiscal measures, such as subsidies or increased public spending, to further stimulate demand.

The Fisher Equation, developed by economist Irving Fisher, provides a crucial tool for understanding the relationship between nominal interest rates, real interest rates, and inflation. The equation shows that the nominal interest rate is the sum of the real interest rate and the expected inflation rate. When inflation expectations rise, lenders demand a higher nominal interest rate to maintain the real value of their returns. In contrast, when inflation expectations are low or stable, nominal interest rates can be kept lower, encouraging investment and spending. Therefore, central banks can adjust nominal interest rates according to inflation expectations and the real interest rate to manage economic activity. If inflation expectations increase, the central bank might raise interest rates to preserve the real return on investments. Conversely, if inflation is expected to decrease, cutting interest rates can help stimulate economic growth and prevent deflationary pressures.

In essence, Keynesian economics emphasizes demand-side solutions to economic issues, particularly through fiscal and monetary policy interventions to influence aggregate demand. Fisher's equation complements this by providing a clear framework for understanding how interest rates interact with inflation [10]. Together, these concepts form the basis for well-rounded and dynamic economic policy making. Policymakers can use a combination of interest rate hikes, cuts, and fiscal interventions to navigate various economic scenarios, ensuring that the economy remains stable, adaptable, and resilient.

Interest rate hikes and cuts, though essential tools, each have their own set of advantages and limitations. Neither can be relied upon as a singular solution to economic challenges. Instead, a balanced approach is required—one that alternates between rate changes or combines them with other financial management strategies. By using these tools together in a complementary fashion, policymakers can avoid the extremes of economic booms and busts, ensuring a more stable and efficient economic environment. In this way, monetary policy becomes not just a reactive tool, but a proactive mechanism for guiding the economy through both turbulent and prosperous times.

5. Conclusions

Through the analysis of the impact of interest rate hikes and cuts, this paper concludes that these two monetary tools need to be used in combination to effectively manage inflation and stabilize the economy. Raising interest rates can help control inflation by making borrowing more expensive and encouraging saving. This typically leads to a reduction in consumer spending and investment, helping to stabilize the price level. However, excessive interest rate hikes can lead to deflation, disrupt resource allocation, and slow economic growth, which can have negative long-term effects.

On the other hand, cutting interest rates can help stimulate economic activity by lowering the cost of borrowing and encouraging spending and investment. This can be particularly useful during periods of economic slowdown. However, cutting interest rates too aggressively can result in inflationary pressures, as it may increase demand without a corresponding increase in supply, driving up prices. Therefore, it is essential to carefully balance interest rate hikes and cuts to avoid the extremes of inflation or deflation.

This study highlights the importance of using both interest rate hikes and cuts as complementary tools to address inflation. The analysis shows that neither method is sufficient on its own to address the complex issue of inflation, which is influenced by multiple factors, including external economic shocks and structural issues. As inflation is often a long-term challenge, it requires a nuanced and adaptive approach. Combining interest rate adjustments with other policy measures, such as fiscal policies or regulatory changes, will be essential for achieving a more stable economic environment.

Given that inflation is subject to external and unforeseen factors, such as global economic conditions and geopolitical events, it is difficult to predict with certainty the outcomes of any single policy measure. Therefore, future research should explore a wider range of strategies to manage inflation and balance economic growth. Policymakers will need to continue evaluating the advantages and disadvantages of both interest rate hikes and cuts, adjusting the approach as new challenges arise. By finding an equilibrium between the two and taking into account potential unexpected situations, more effective and resilient economic policies can be developed.

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