The Impact of the Fed's Interest Rate Hike on the Financial Industry: Focusing on the Exchange Market and Capital Market

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Abstract. Since the outbreak of the Covid-19 epidemic, the Federal Reserve has implemented extremely loose fiscal and monetary policies, which has exacerbated the inflation problem in the United States. To combat high inflation, the Fed began raising rates in March 2022. This paper evaluates the impact of the Fed rate hike on the US financial sector, as well as on the foreign exchange market and the global capital market. The study found that higher interest rates could lead to higher interest rates in the interest rate market, and money would also flow from the stock market to the bond market, dealing a huge blow to banking funds. The paper also assesses the pace and magnitude of rate hikes and concludes that the Fed needs to slow and narrow the pace of rate hikes to prevent too fast and too large a rate hike from potentially causing chaos in the domestic financial sector.

Keywords: Interest rate, financial industry, exchange market, capital market.

1. Introduction

On March 2, 2023, the US Federal Reserve Board announced that it would raise the target range for the federal funds rate by 75 basis points to 3.75%-4%. It was the fourth straight 75 basis point increase. Since the first hike in March 2022, the Fed has raised rates by 425 basis points. In the post-COVID-19 era, the United States has seen modest growth in national production, strong job growth, and low unemployment, but high inflation. Data released by the US Bureau of Labor showed that the national consumer price index (CPI) even reached 9.6% in February 2023, well above the 2% desired by the US [1].

However, it also reflects the ongoing impact of the supply-demand imbalance from the COVID-19 era. Not only does high inflation put severe upward price pressure on food and energy prices and other consumer goods, but its spread of global economic integration also puts pressure on other economies around the world. On the other hand, the current unemployment rate in the United States is below 5 percent, which is the minimum limit for the United States to control the economy. To reduce the price pressures and economic effects of high inflation and high employment, the Federal Reserve decided to tighten monetary policy. It was the first-rate hike since 2018. While inflation has eased, it has had other macro - and micro-level effects on broader finance in the United States. Consequently, this paper aims to discuss the impact of the US interest rate rise on the financial industry of the US and some affected countries, including the interest rate market and the capital market.

2. Literature Review

The interest rate policy in the United States led to a significant amount of academic research. Maria Eleftheriou and Georgios P. Kouretas (2022) examined the monetary policy rules and inflation control in the United States and noted the use of discretionary power in three distinct time periods. They discovered that the American interest rate's long-term target path was comparable to the Taylor rule, and the decrease in the policy rate had a positive impact on lowering inflation [2].

In exchange markets, it is widely assumed that higher interest rates will lead to higher exchange rates. The study of Dornbusch (1976) posits that monetary expansion leads to currency depreciation, and that the magnitude and duration of overshoot are determined by the structural parameters of the model [3]. However, this theory is universal and discoveries have been made in studying the relationship between interest rates and exchange rates. In Shaobo Long's (2022) study, the asymmetric relationship between interest rate difference and economic policy uncertainty under different exchange rates between China and the United States was revealed: the RMB exchange rate appreciation caused by the widening of interest rate spread is greater than the RMB exchange rate depreciation caused by the narrowing of interest rate spread between China and the United States, and there is an asymmetric relationship between the EPU ratio between China and the United States and the RMB exchange rate in both the long and short term. Investors and policymakers should pay more attention to the uncertainty of economic policy, not just the profit opportunities arising from changes in interest rate differentials. However, because it chooses China as the object of study, which is the largest emerging market economy as the research object, the economic significance cannot be fully applied to other countries, so it has certain limitations [4]. Therefore, the impact of interest rates on the parities of different emerging economies needs further study. However, there is an increasing number of studies showing that this link seems to be ambiguous, (Emanuel Kohlscheen 2014) as there is no indication that the exchange rate confusion characteristic of VAR literature is due to reverse causality [5]. This makes the connection between interest rates and exchange rate movements seem more elusive than current open-economy models suggest. Therefore, traditional rational expectations theory cannot explain the connection between the interest rate market and the exchange rate market. The purpose of this paper is to study the impact of the Fed's rate hike on the interest rate market.

In the capital market, according to the traditional interest rate parity theory, when the interest rates of two countries are different, the capital flows from the country with low-interest rate to the country with high-interest rate to seek profits, so the fluctuation of interest rate will directly cause the fluctuation of the capital market. From this point of view, higher interest rates are conducive to capital flows into the US, bringing more vitality to the US financial sector. According to Tatjana Dahlhaus and Garima Vasishtha (2020), existing research suggests that the impact of US monetary policy news shocks may be asymmetrical across countries [6]. Although the current rate hike of the Federal Reserve is rarely high in history, the ultimate goal of the Federal Reserve is to normalize monetary policy, and its realization path is bound to cause volatility in the global financial market, especially for emerging markets. Rising bond yields will trigger portfolio reshuffles, and the effects are likely to be amplified in countries with imperfect markets. Therefore, the impact of US monetary tightening on emerging markets will depend on the degree of vulnerability of emerging market countries.

3. The Impact of the Fed's Interest Rate Hike on the Exchange Market

An important element of fundamental analysis of foreign exchange markets is to forecast the difference in the economic conditions of two countries, and the main driver of exchange rates is the difference in yields between countries. If a country offers higher returns, known as interest rates, then it attracts capital inflows and tends to raise its exchange rate relative to other countries. If current yield differentials are reflected in exchange rates, then the change in expected differentials is the key reason for the change in expected exchange rates.

Here, a numerical Index should be introduced, namely LEI (leading Economic Index), which is an effective measurement index of the US business cycle conducted by the Conference Board. The leading economic index of the US is based on 10 variables, and the parallel economic index is based on four variables. This is a key element of a comprehensive economic indicator and an analytical system designed to show the peaks and troughs of the business cycle. If the LEI for country A goes up while the LEI for country B goes down, this will indicate that the yield differential is moving toward A and predict that the B/A foreign exchange rate will go up, or equivalently, that the A/B foreign exchange rate will go down. Following a 0.3% decline in January, the Leading Economic Index (LEI) for the United States fell another 0.3% in February 2023 to 110.0 (2016 = 100), according to data released by the Conference Board. During the six months from August 2022 to February 2023, the LEI declined 3.6 percent, a steeper decline than the 3.0 percent decline in the previous February-August 2022 period [7].

According to LEI theory, the U.S. foreign exchange rate is about to rise relative to other countries. That makes sense because rising interest rates attract international investors to the U.S. economy, increasing demand for dollars. This has led to a rise in the value of the dollar, followed by a fall in the value of other currencies. Thus, affecting international trade between different parts of the world. Higher US interest rates cause the dollar to rise sharply, which in turn causes the euro, yen, and yuan to fall.

However, some different views argue that higher borrowing costs for businesses and individuals caused by higher interest rates have led to an economic slowdown, resulting in lower exports and less foreign investment. In recent years, the Fed has implemented low-interest rates to support economic growth and spur lending and spending. The Fed has kept the federal funds rate near zero since the 2008 global financial crisis, which has led to lower borrowing costs and increased liquidity in financial markets. When interest rates are low, they stimulate economic activity by encouraging borrowing, investment, and hiring. However, if interest rates are too low for too long, they can lead to asset bubbles and financial instability. Especially in the post-pandemic era, with the economic crisis almost sweeping the world, continuing low-interest rates and loose monetary policy seems to have done more harm than good. Thus, the Fed must strike a balance between economic growth and financial stability, raising interest rates to maintain stable inflation and employment levels and avoid asset bubbles and financial instability.

The continuous decline of the LEI in response to rate increases also puts the United States at risk of recession. The Conference Board predicts that rising interest rates, combined with falling consumer spending, will most likely push the US economy into recession in the short term. The Conference Board predicts that if the turmoil continues, it could negatively impact the outlook. Overall, rising interest rates combined with falling consumer spending would most likely push the US economy into recession in the short term. In this case, a slowing economy creates an uncertain environment that causes investors to become more risk-averse and pull money out of stocks. That could cause the dollar to fall as investors sell their investments. Figure 1 from the conference board shows the change in the LEI for the United States from 2000 to 2022. What can be seen is that in every economic crisis, the LEI has shown a tendency to bottom out, and then immediately after that it shows a surprising rebound. In particular, after 2022, the LEI has shown heights not seen in 20 years. After the peak, it will fall again. Thus, from the point of view of the business cycle, slumps and recessions are normal and regular. All in all, the impact of the Fed rate hike on currency markets is ambiguous.

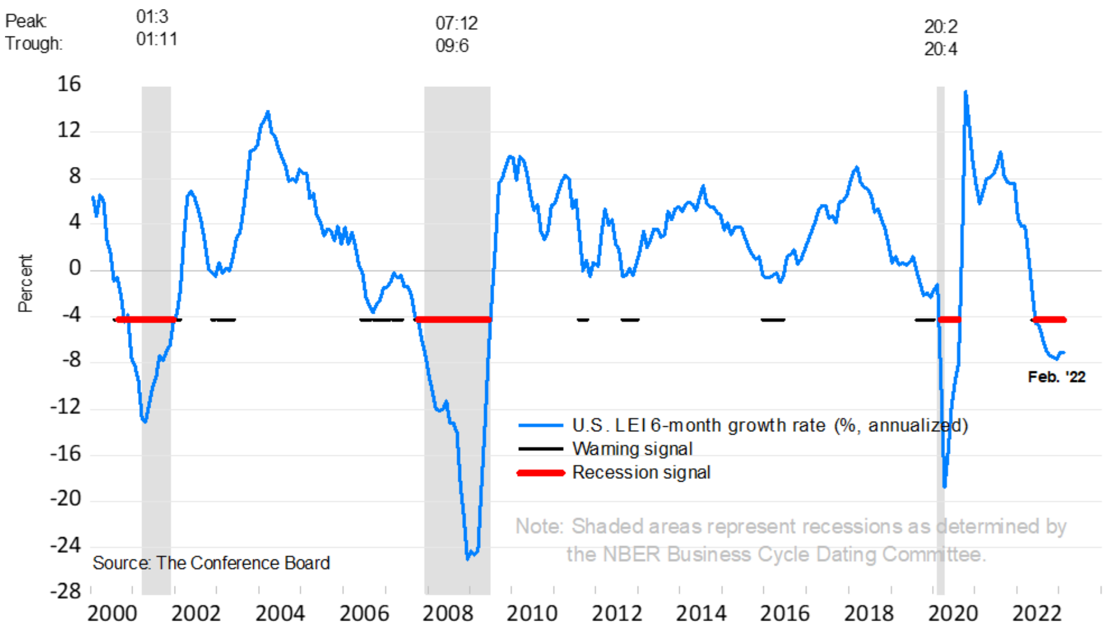

Fig. 1 Change in the LEI for the United States From 2000 to 2022

4. The Impact of the Fed's Interest Rate Hike on the Capital Market

The link between interest rates and investment discussed in this article is multifaceted, including its impact on capital flows, stock markets, and commodity markets.

4.1. Capital Market

For the capital market, the fluctuation of the stock market indicates that there is a leverage amplification effect between interest rate and asset price. Even a small rate hike by the Fed could cause asset prices to fall sharply, leading to a drying up of asset liquidity in emerging markets. Interest rate differentials mean that capital will flow to the US at the international level, but countries with different financial structures are affected differently by rate rise cycles, as was the case in previous Latin American debt and Asian financial crises. This is akin to a tidal cycle: in a rate-cut cycle, global capital booms and asset prices rise, but a rate-rise cycle can have serious implications for countries. As a result, many countries have anticipated and adopted rate increases, such as Mexico, which raised its benchmark policy rate to 11%, a record borrowing cost [8]. But that may not fully offset the disruption to global capital markets caused by the Fed's rate hike. But they may be hurt less than other countries that do not raise rates, such as China, which will face increased capital outflows.

4.2. Stock Market

For the stock market, the performance of the stock market is significantly affected by the interest rate. When interest rates are low, companies' ability to borrow goes up and share prices go up. Moreover, low-interest rates make bonds less attractive, so more capital flows into equities. But when interest rates rise, capital flows out of the stock market, causing share prices to fall, as higher rates make bond investments more attractive and companies' borrowing costs rise. Stock market volatility has been particularly pronounced in the banking market. In March 2023, Silicon Valley Bank (SVB) and Signature Bank declared bankruptcy in succession. This is the largest wave of bank failures in the United States since 2008. During the pandemic, low-interest rates at the Federal Reserve and the growth of the technology industry helped SVB's double or more the amount of money their customers deposited with the bank. But as the Fed began to raise interest rates to fight inflation, the value of SVB's investments fell, private financing became more expensive and the probability of withdrawal increased rapidly. Amid the divestment wave, SVB generated a $1.8 billion loss on asset sales, but could not prevent its shares from being suspended after plunging 60 percent [9]. As a result, the pace and magnitude of the Fed's rate hikes are highly questionable, as they have jeopardized the integrity of the nation's financial system and caused a great deal of investment panic. It is reasonable to predict that interest rate hikes may lead to short-term declines in the stock market, but in the long run, the stock market may recover when interest rate hikes stop or the pace becomes stable. However, if interest rates continue to rise sharply, the stock market will likely continue to fall.

4.3. Commodity Market

For commodity markets, the basic mechanism can be understood: higher interest rates will most likely lead to an appreciation of the dollar, which will lead to a decline in the price of commodities traded in dollars. Because commodities such as gold and oil are traded globally in dollars, rising interest rates cause their prices to fall. According to the data released by the International Monetary Fund, the price of non-fuel commodities in the fourth quarter of 2022 fell by 12% from the first quarter, and the price of energy commodities fell by 6.9% (see Figure 2). Visualizing the data, it can be found that the overall trend of commodity CPI in the US from 2020 to 2022 is on the rise, with prices in energy, food, industrial metals, and other sectors rising sharply [10]. Much of this has been driven by supply chain disruptions, increased demand due to economic recovery, and geopolitical tensions. Some commodities, such as oil, have seen big swings due to fluctuations in global oil supply and demand. Inflation fears triggered by rising commodity prices are also a major concern for policymakers and investors.

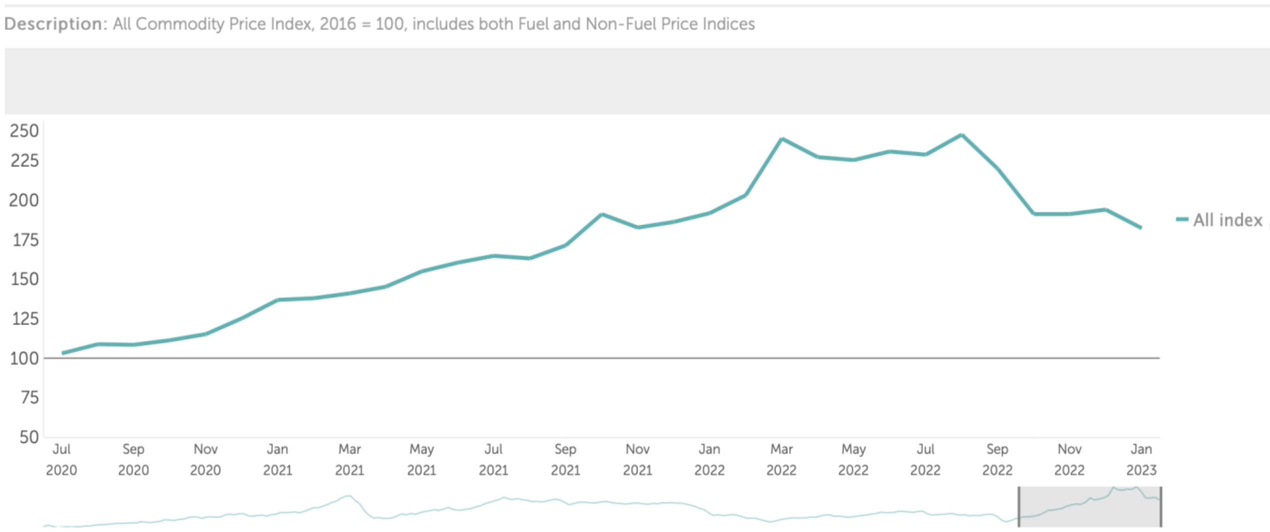

Fig. 2 All Commodity Price Index (2016=100, including fuel and non-fuel price indices)

Moreover, commodity prices are influenced not only by how much interest rates rise but also by how quickly the Fed raises rates. If the Fed's rapid rate hike leads to a slowdown or recession in global economic growth and a drop in demand, easing the imbalance between supply and demand for commodities and slowing or falling commodity prices, exporting countries that are highly dependent on commodities due to falling commodity prices will be particularly hurt. However, if the Fed takes economic growth into account, the rate and intensity of interest rate hikes will slow down, the slowdown of demand is small, and the contradiction between supply and demand cannot be eased, then commodity prices will remain high and there will be inflation in the medium and long term.

5. Conclusion

The Fed's decision to raise rates marks a significant shift in the central bank's stance on monetary policy in the post-pandemic era. This paper explores the Impact of the Fed's interest rate on the exchange market and capital market, and the study reveals that the rate rise reflects the Fed's confidence in the US economy and its commitment to stable levels of inflation and employment. However, this decision also creates risks and challenges for the US and the global economy, especially in the context of the current global economic crisis and uncertainty. From the current point of view, the impact of an interest rate hike on the exchange rate market and the capital market needs to be further discussed. On the one hand, the impact of interest rate hike on the interest rate is unclear; on the other hand, the interest rate hike will lead to the volatility of the stock market, capital inflow, and the bearish commodity market. But overall, the outcome will depend on many factors, including the pace and timing of future increases, the reaction of financial markets and investors, and the ability of governments and institutions to manage and mitigate risks.

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