

# The History of Fed Interest Rate Hikes and the Impact on Stock and Foreign Exchange Markets

Wenting Zhang \*

Business school, University of Edinburgh, Edinburgh, EH8 9YL, United Kingdom

\* Corresponding Author Email: S2329665@ed.ac.uk

**Abstract.** Following COVID-19, America uses policies to boost its economy, inadvertently pushing inflation from 2018 to 2022. This paper discusses the history of the Federal Reserve rate increase and its repercussions on financial areas, especially on the stock and foreign exchange markets. The main analysis centers on the impacts of the markets and behaviors of the answers. Initially, the Federal Reserve rate increase seemed economically beneficial. However, long-term effects may negatively impact both domestic and international economies to some degree. By examining historical data, this paper dissects the rationale behind such moves and their direct outcomes. This offers a better perspective on potential future interest rate influences. For investors, to be positive and need to adjust their investment strategies to adapt when they face the Federal Reserve rate increase. For policymakers, during the fluctuations in interest rates, they need to maintain the global equilibrium as far as possible, without excessive disruption or impact.

**Keywords:** Federal Reserve Rate Increase, stock market, foreign exchange market, history of Federal Reserve Rate Increase.

## 1. Introduction

“In April of 2022, the one-year inflation rate was 9.0%, 6.3%, and 7.5% in the United Kingdom, the United States, and the Eurozone” [1]. Because of the apparent inflation, a monetary policy must be carried out to effectively manage inflationary pressures and regulate economic development, thereby decreasing the volatility of adverse events. Therefore, the government implemented a strategy to increase the Federal Reserve rate as a means of managing major inflationary pressures. The aim of the strategy was to control inflation, promote employment, and ensure economic stability. In fact, even though such a measure may have short-term economic benefits, it may cause some adverse consequences to the global world. As a result, the Fed's rate hike plays a key role in US internal monetary policy. The Federal Reserve's decision to raise interest rates has had an important impact on both stock and foreign exchange markets.

This article will initially investigate the historical background of previous Federal Reserve interest rate increases and their subsequent effects on the financial market. The historical survey will provide basic ideas for the potential consequences of the upcoming interest increase. In addition, this paper aims to provide a study of the underlying factors affecting the Federal Reserve rate increasing strategy and their immediate consequences, as well as access and analyze the impact on markets and foreign exchange markets. In the stock market sector, there is a controversy over the impact of the rise in interest rates on stock prices, investor behavior, and market volatility. Similarly, foreign exchange markets have an impact on currency exchange rates, trade flows, and capital flows. These have great importance to international investors, local investors, and policymakers in different countries. The main purpose of this paper is to analyze the effect of the Federal Reserve rate increase on the stock market and foreign currency market. By reviewing historical data, an analysis of factors of the Federal Reserve rate increase and an exploration of the immediate consequences of these actions will help to analysis the Federal Reserve rate increase impacts to the world.

## **2. Historical Fed Rate Increase Behavior and Impact**

### **2.1. 1983-1984 US Federal Reserve Rate Increase by 3.25%, Debt Crisis in Latin America**

The six major rate increases in American history have brought about a double effect. From 1983 to 1984, when the US faced high inflation threats, the Fed raised interest rates by 3.25% totally [2]. However, this has led to lower external debt costs for Latin American countries in an environment of low interest rates. In Latin America, the total external debt increased to 159 billion dollars in 1978 and 327 billion dollars in 1982 [3]. That attracted more international capital, but also left them with expansionary policies and deficit finance. The high interest rate policy of the United States led to the withdrawal of international funds. Latin American countries fell into a shortage of funds, currency depreciation and worsening balance of payments, further the crisis.

### **2.2. 1988-1989 US Federal Reserve Rate Increase 3.31%, Japan's Economic Crisis**

In 1987, the American stock crash prompted the Fed to cut interest rates urgently, triggering. In order to contain inflation, the Fed began tightening monetary policy, leading to a slowdown in US economic growth [2]. Since Japan is a big exporter and the dollar flows to Japan, the United States has adopted a policy of devaluing the dollar in order to improve export competitiveness. At the same time, Japan wants to increase the money liquidity and expand overseas and domestic demand. In 1985, the five countries reached a "square agreement". This has hit Japanese importers and exporters hard, cutting margins and forcing them to cut costs. Japan's rate cuts have led to a massive influx of people into the stock and foreign exchange markets [4]. Therefore, the bubble eventually burst, leading to falling house prices and Japan's economic depression. It is the imbalance of the Japanese policies.

### **2.3. 1992-1995 US Federal Reserve Rate Increase by 3%, Southeast Asian Financial Crisis**

From 1992 to 1995, the Federal Reserve rate increased by 3% [2]. In the early 1990s, Southeast Asia's economy boomed and developed. Under the control of the Federal Reserve, a large amount of financing flowed into Southeast Asia and caused the economy to overheat in many countries. Thailand's financial policy of fixed exchange rate, more international intervention, and the effect of outside factors led to a rapid depreciation of the money, which was subsequently announced to float, which led to an immediate plunge of nearly 17% on the same day [5]. Thus, the different Southeast Asian countries actually had a big impact starting from Thailand.

### **2.4. 1998-2000 US Fed Rate Increase 1.75%, US Internet Bubble**

The Federal Reserve rate increased at the end of 1998 to cope with inflationary pressures, until the peak of the US economic cycle was established in 2000, it starts at 4.75 and stops at 6.50, last for 11 months [2]. However, as the economy and interest rates reached a peak, valuations fell sharply, earnings growth decreased, growth in the technology industry slowed, and supply and demand slumped. During the U.S. government's strong supervision period, well-known technology companies such as Enron and WorldCom were involved in counterfeiting, investors' trust in technology stocks plummeted [6], fundamentals of the market and investors emotions doubled and the bubble burst.

### **2.5. Subprime Mortgage Crisis in U.S. amid 4.25% Interest Rate Hike in 2003-2006**

It increased by 4.25% in 24 months from 2003-2006 [2]. The September 11, 2001 attacks triggered panic in the United States, a recession, and the Federal Reserve adopted a monetary expansion policy. The interest rate hike is mainly aimed at curbing the rise in housing prices and inflation, but the most significant impact is the issuance of subprime mortgage loans, and after a few years, the subprime mortgage crisis broke out.

### **2.6. Interest Rate Increase by 2% in 2015-2018: US-China Trade War Breaks Out**

Between December 2015 and December 2016, the Fed slowed the pace and frequency of rate hikes, implementing a 36-month observation period, increasing 2.25% [2], because of growing downside

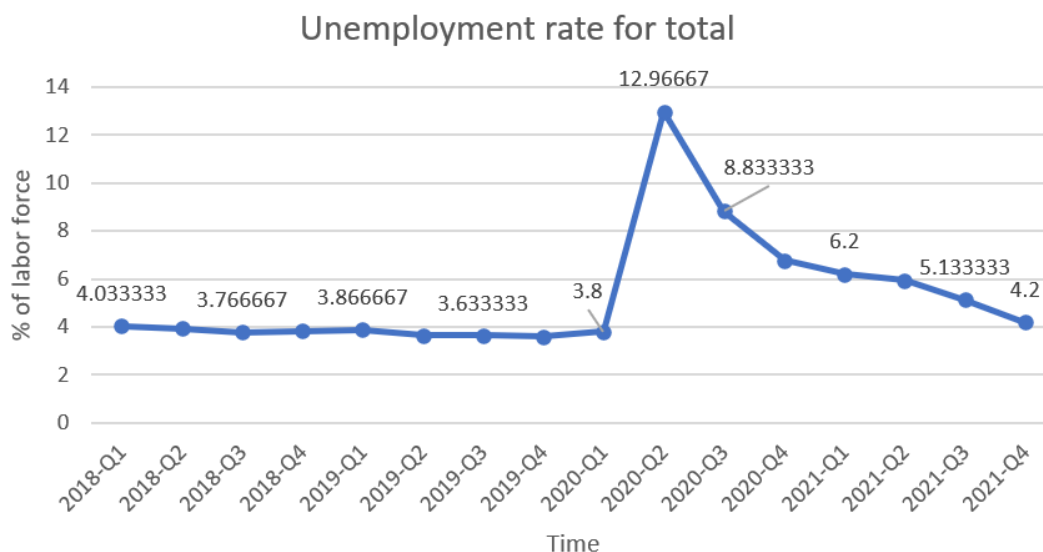
risks to the global economy. Moreover, the interest rate increases in 2015 was also linked to the weakness of the dollar index at the time. Since the financial crisis, the United States has maintained a low-interest policy, leading to capital outflows and reduced inflows of foreign funds. At the same time, the dollar was sold in the foreign exchange market, causing the rate to fall. As a result, America has publicized a policy of raising interest rates to attract foreign currency inflows and to promote the valuation of the dollar. The move China to resist the policies in order to increase itself, which led to a trade war.

In terms of the six historical backgrounds, the most basic causes of the increase in interest rates are inflation, and the economic downturn, which is aimed at raising interest rates to revive the economy or restore growth. This allows the country's economy to grow rapidly, attract shareholders and international investors, and decrease significant inflation. Other countries, particularly emerging countries, face devaluation of currencies, export-import prices, and a failure to adjust monetary policy.

### 3. Analysis of the Fed's Motivation to Increase Interest Rates and Direct Results

#### 3.1. Coronavirus and Economic Crisis

The emergence of the coronavirus led to the global economic crisis, and some countries into recession. As a result, a large proportion of the population is affected by employment challenges such as corporate insolvency, mismanagement practices, and a reduction in the labor force.

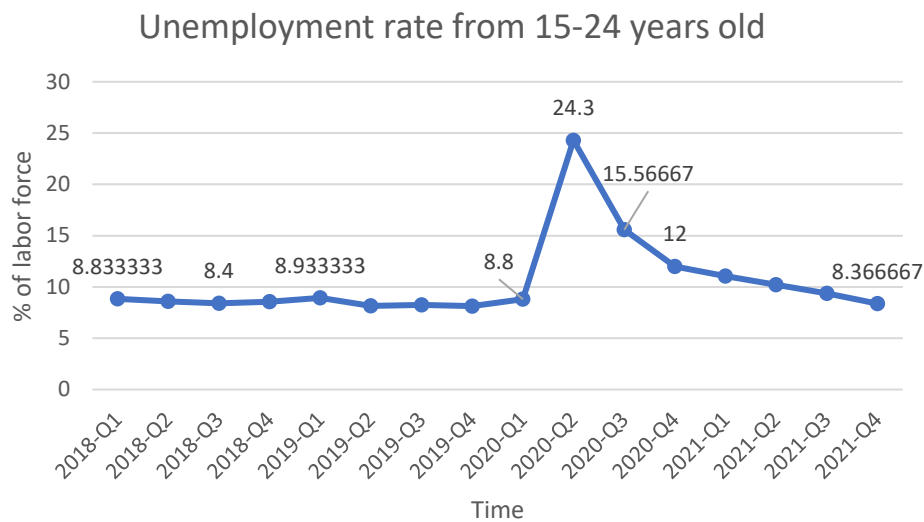


**Figure 1.** Unemployment rate for total

Data source: <https://data.oecd.org/unemp/unemployment-rate.htm#indicator-chart>

Photo credit: Original

The unemployment rate in the United States is approximately 12.97 percent, 24.30 percent, and 11.45 percent respectively in Figures 1, 2, and 3, which may be connected to factors such as inadequate skills, inexperience, and limited capacity for young people, but also the shutdown of company will affect people's employment.



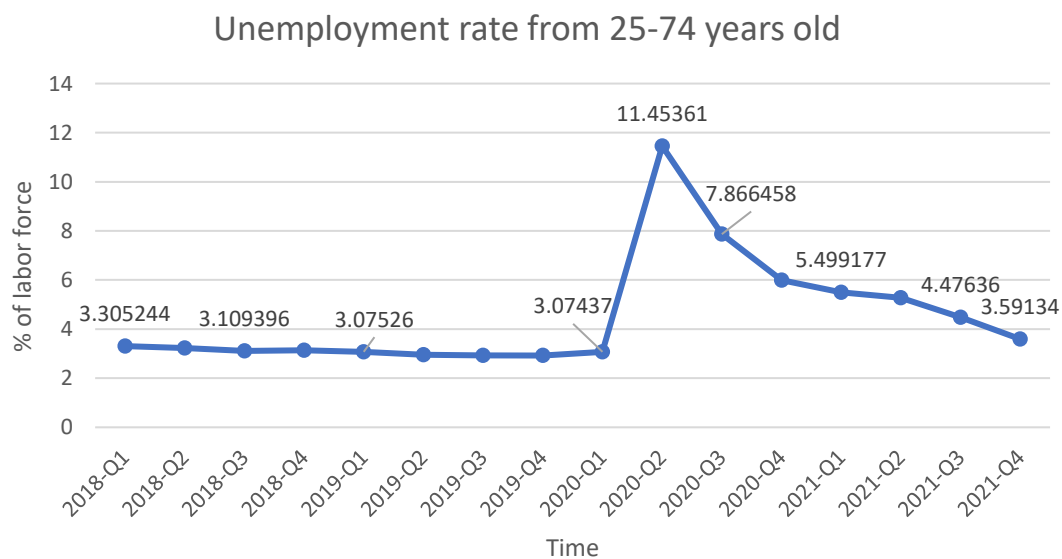
**Figure 2.** Unemployment rate from 15 to 24 years old

Data source:

<https://data.oecd.org/unemp/unemployment-rate-by-age-group.htm#indicator-chart>

Photo credit: Original

From 2020 to 2021, Figure 4 showed a steady growth in quarterly gross domestic product (GDP) about America. When between 2010 to 2019, it rise steady, but during 2020 to 2021, which is decreasing 12.1 million dollars.



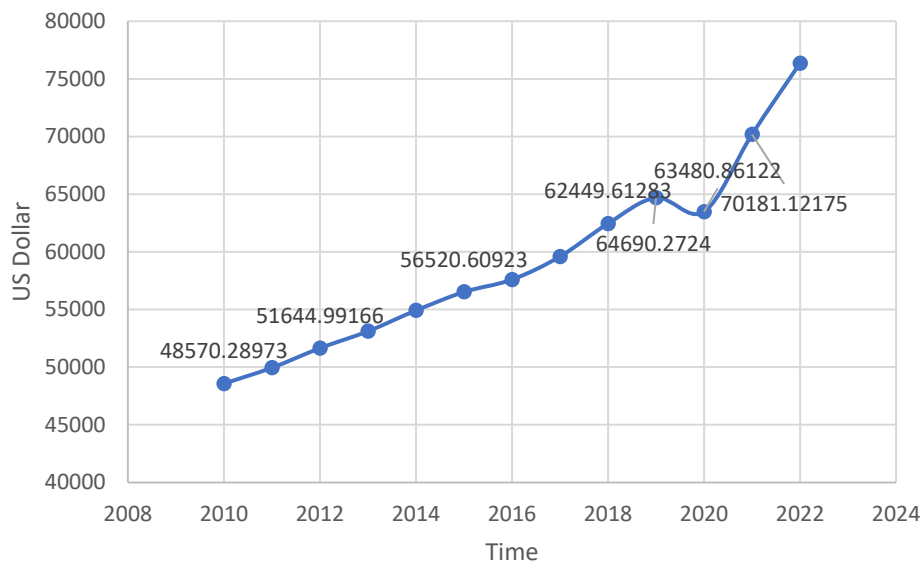
**Figure 3.** unemployment rate from 25 to 74 years old

Data source:

<https://data.oecd.org/unemp/unemployment-rate-by-age-group.htm#indicator-chart>

Photo credit: Original

In response to the crisis, the United States government and the Federal Reserve have implemented abundant stimulus measures, including fiscal stimulus and reductions in interest rates. The primary objective of these stimulus measures is to provide economic assistance throughout the recovery stage. However, it is important to acknowledge that they may also have the potential to induce inflation and create volatility within financial markets.



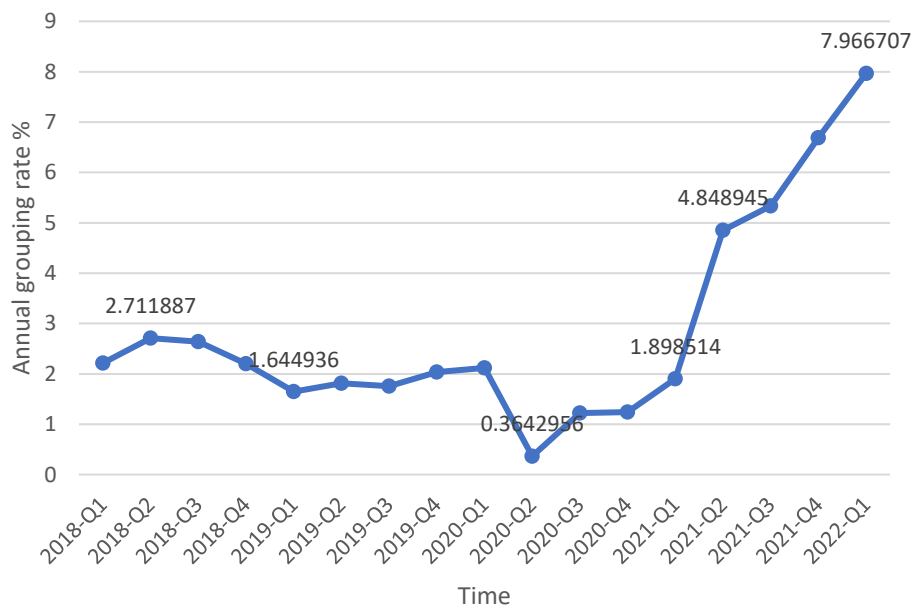
**Figure 4. GDP**

Data source: <https://data.oecd.org/gdp/gross-domestic-product-gdp.htm>

Photo credit: Original

### 3.2. Inflation

Based on available data, Figure 5 shows a significant upward from the second quarter of 2020 to the first quarter of 2022. The underlying cause comes from different policies that have subsequently led to an upward trend in inflation. Therefore, significant currency depreciation, and significant commodity price increases. Inflation had a great negative impact on employment, leading to more unemployment. In addition, it had a serious impact on the financial expenditures of organizations. In the long term, the Fed is perfecting it by adjusting the interest rates.



**Figure 5. Inflation**

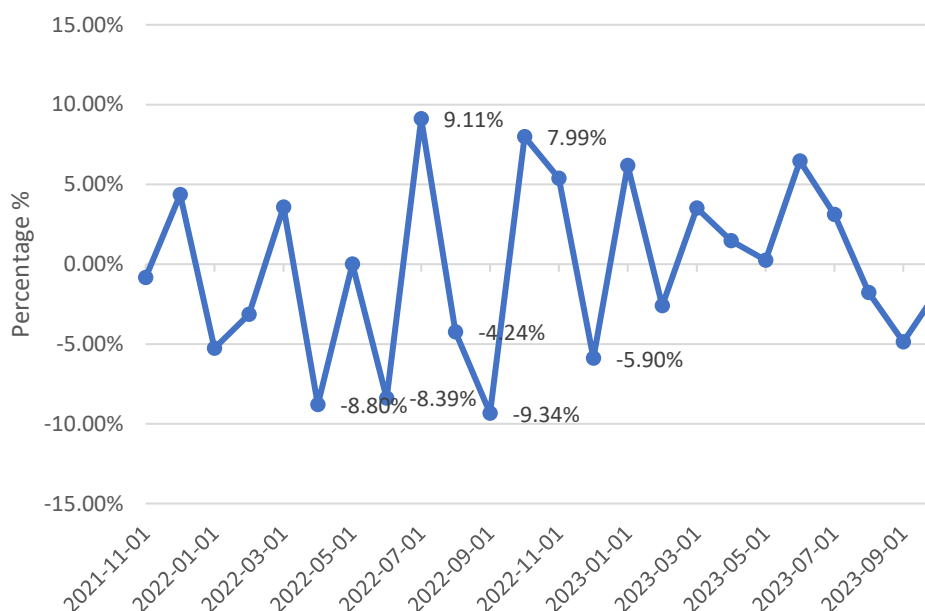
Data source: <https://data.oecd.org/price/inflation-cpi.htm>

Photo credit: Original

## 4. The Impact to Stock Market

### 4.1. The Direct Impact to America and Total Stock Market

According to Standard & Poor's, Figure 6 is highly fluctuating from the Federal Reserve rate increase. Each change has a significant impact on the stock market, most of which has led to a decline in the index. The Fed's interest rate rises will immediately affect the macroeconomy, which is linked to equities, leading the stock market to fluctuate. Stock markets in numerous nations fluctuated when the Federal Reserve boosted interest rates. Americans are seeing the detrimental effects of liquidity tightening on their firms and financial markets. U.S. stock profits are predicted to plummet 12.1% in the fourth quarter and 5.7% in the entire year of 2022. The adjusted operating profit margin of U.S. non-financial corporations fell to 14.3% in the fourth quarter of last year, the lowest in two years [6]. The cash bottleneck induced by the Federal Reserve's interest rate rises has reduced circulation for many firms, lowering earnings and stock values. This will also harm numerous foreign enterprises that work with the US. This will hurt the stock market overall.



**Figure 6.** Range of fluctuation

Data source: <https://cn.investing.com/indices/us-spx-500-historical-data>

Photo credit: Original

### 4.2. The Impact to Specific Markets

For the banking sector, it is a big strike. “A raft of other regional lenders fell after the opening bell: Western Alliance Bancorp slid 17%, while Comerica and Zions Bancorp fell by 8% and 7%, respectively. First Horizon sank by 37% after its \$13.4 billion sale to Toronto's TD Bank was called off” [7]. This shows that the Federal Reserve rate increase has caused large decreases in banks' shares in different countries, showing higher borrowing costs and decreased credit demand, which might lead banks to raise interest rates to balance or minimize losses.

For commodities, it is also affected by the Federal Reserve rate increase. The international crude oil prices decreased to \$63.79, which is the lowest price in 18 months [8]. From statistics, commodities have experienced a significant reduction in interest rates due to their strong correlation with the dollar index. Therefore, the restricted movement of capital has resulted in price reductions across various commodities, leading to a decline in overall prices.

### **4.3. The Impact to Other Markets**

Canadian Exchange says that “losses in technology and base metal stocks helped lead a broad-based decline as Canada's main stock index fell almost 130 points” [9]. From here, the Federal Reserve rate increase has had a certain impact on Canadian stocks. The effect is to shift some of the pressure to the Canadian market through the Federal Reserve rate increase. The result will not only affect the volatility of Canadian stock markets, but will also raise prices for some Canadian products and inflation. For the Indian Exchange, the market breadth was skewed in favor of the bears. About 2,436 stocks declined, 1,230 gained, and 127 remained unchanged on the BSE. According to the data, India's stock market is under pressure because of the Fed's inclination or behavior to raise interest rates. Among them, major stocks plunged, an act that, if unchecked, could easily cause the Indian market to collapse [10]. So overall, the Federal Reserve rate increase has had negative impacts on the Indian market. These two countries are two examples of the Federal Reserve rate increase, and many have negative equity markets that require some strategies to be addressed.

## **5. Impact on the Foreign Exchange Market**

### **5.1. Direct Impact on the United States as a Whole**

The main driver of exchange rates is the difference in yields between countries. If a country offers higher interest rates, it attracts capital inflows and tends to increase its exchange rate relative to other countries. Until 2022.10, “the sum of all net foreign acquisitions of long-term securities, short-term U.S. securities, and banking flows was a net TIC inflow of \$179.9 billion. Of this, net foreign private inflows were \$167.7 billion, and net foreign official inflows were \$12.2 billion” [11]. The decision to boost interest rates might cause severe exchange-rate changes across currency pairings, resulting in large capital inflows into the US and the dollar becoming more valuable. Federal Reserve rate increased frequently and substantially, which caused a large amount of capital flow to the US. The appreciation of the US dollar occurred, which drove the depreciation of the currencies of other economies [12]. Thus, such fluctuations may have influenced international trade and cross-border investment, as they change currency exchange rates and international market competitiveness. Impacts on international enterprises, exports, and imports could lead to lower exchange rates or other countries' exchange rate devaluation. Therefore, affecting the foreign exchange market.

### **5.2. Impact on Emerging Markets**

The exchange rates of emerging countries' currencies have fallen significantly, but they have been affected by different degrees. After the Federal Reserve rate increase, global dollar liquidity tightened, interest spreads between emerging markets and the US narrowed, capital flowed back from emerging markets to the US, and exchange rates fell in emerging markets. As a result, this has led to direct changes in the exchange rates of emerging countries [13]. Because emerging economies lose monetary policy independence due to increasing risk of devaluation and debt risks, following the cost of rising interest rates on local currencies' debt, less corporate and resident demand, and leading recession risks. For example, Turkey's currency crisis in 2018, accompanied by a dollar rate hike cycle and trade friction, was 41% in 2018 [14]. So, for emerging countries, if they do not strike a good balance, they will suffer a huge exchange-rate crisis.

### **5.3. China's Foreign Exchange Policy**

With global interest rates increasing in different countries, China is cutting interest rates. On the evening of June 13, the People's Bank of China cut its Standing Lending Facilities (SLF) rate by 10 basis points to 2.75% overnight, 10 basis points to 2.9% in seven days and 10 basis points to 3.25% in one month [15]. The result is a timely stop of the loss and reduce the foreign exchange losses. Because interest rate cuts mean looser policies, people, and companies can take their money out to

invest and buy, voluntarily lowering the exchange rate to curb inflation caused by the Federal Reserve rate increase.

## 6. Conclusion

This paper mainly discusses the history and impact of Federal Reserve rate increases, including their impact on global finance. With inflationary pressures and the challenge of overheating, the Fed has repeatedly taken steps to increase interest rates. Although these policies have a positive impact on the American economy, they have a series of global economic fluctuations and crises in the long run. This study focuses on the analysis of the reasons for the Federal Reserve rate increases, as well as on the stock and foreign exchange markets. The aim of the study was to find out how the Fed influenced stock markets and foreign exchange markets. Research showed that the Federal Reserve rate increases are aimed at controlling inflation or getting better economic development, but at the same time have hurt equity markets, particularly in the banking sector and commodity markets, including overseas markets. In the foreign exchange market, other countries are negatively affected by the dollar interest rate increasing, putting more money into the United States. Therefore, in order to better prevent the negative effects, there are three recommendations: 1) adjusting monetary policy in a timely, maintaining monetary policy adaptability 2) optimizing fiscal spending, ensuring efficiency and effectiveness 3) creating good cooperation with other countries to face global economic challenges together.

## References

- [1] Reis R. The burst of high inflation in 2021 - 22: How and why did we get here? [M]. Bank for International Settlements, Monetary and Economic Department, 2022.
- [2] Road pioneer Zhang Ming. Federal Reserve Rate Increase: Historical Cycle, Internal and External [3] Impact and Empirical Implications [J]. *Financial Market Research*, 2022 (12):48 - 55
- [3] Aremu J O. A historical analysis of the nature causes and impact of the foreign debt crisis in Latin America, 1970 - 1980 [J]. *Humanities and Social Sciences Letters*, 2018, 6 (3): 74 - 83.
- [4] Analysis on the Influence of the Plaza Agreement on Japan's Economy and Its Enlightenment to China [J]. *Western Finance*, 2021 (07): 19 - 24+31. DOI: 10.16395/j.cnki.61-1462/f.2021.07.003.
- [5] Liu Ding. The Financial Crisis in Latin America and Southeast Asia and Its Enlightenment to China from the Perspective of Monetary Sovereignty [J]. *Developmental Finance Research*, 2021 (01): 36 - 45. DOI: 10.16556/j.cnki.kfxjr.20200728.002.
- [6] Du Chuanzhong and Guo Meichen. The American Internet Bubble at the End of the 20th Century and Its Enlightenment to the Development of Chinese Internet Industry [J]. *Journal of Hebei*, 2017, 37 (06): 147 - 153.
- [7] HORNER W. Indexes Open Lower Following Federal Reserve Interest-Rate Increase – WSJ [EB/OL]. (2022-04-04) [2023-10-28]. <https://www.proquest.com/wire-feeds/indexes-open-lower-following-federal-reserve/docview/2809345656/se-2?accountid=10673>.
- [8] Ye Qing. U.S. interest rate hike hit commodities [N]. *China Times*, 2023 - 05 - 08 (009). DOI: 10.28391/n.cnki.nhxs.2023.000369.
- [9] The Canadian Press. TSX declines, U.S. stock markets flat as U.S. Federal Reserve rate decision looms [EB/OL]. (18 - 09 - 2023) [2023 - 10 - 28] <https://www.proquest.com/wire-feeds/tsx-declines-u-s-stock-markets-flat-as-federal/docview/2866545999/se-2?accountid=10673>.
- [10] Business World. Market Meltdown: Major Indices Plummet as Fed's Influence Takes Toll [EB/OL]. (22 - 09 - 2023) [2023 - 10 - 28]. <https://www.proquest.com/magazines/market-meltdown-major-indices-plummet-as-feds/docview/2866934135/se-2?accountid=10673>.
- [11] Treasury International Capital Data for October [EB/OL]. U.S. Department of the Treasury, 2022 - 12 - 15. (2022 - 12 - 15) [2023 - 10 - 28]. <https://home.treasury.gov/news/press-releases/jy1165>.

- [12] Iacoviello M, Navarro G. Foreign effects of higher US interest rates[J]. *Journal of International Money and Finance*, 2019, 95: 232 - 250.
- [13] Treasury International Capital Data for October[EB/OL]. U.S. Department of the Treasury, 2022-12-15. (2022 - 12 - 15) [2023 - 10 - 28]. <https://home.treasury.gov/news/press-releases/jy1165>.
- [14] Mehmet K. EFFECTS OF MARKET VARIABLES ON NET INCORPORATION: EVIDENCE FROM TURKISH 2018 DEBT AND EXCHANGE RATE CRISIS[J]. *Journal of Business Economics and Finance*, 2020, 9 (4): 373 - 385.
- [15] Irene Chow. China's unexpected rate cut on the eve of the Fed's suspension of rate hikes may follow a cut in MLF this week. *Business News No. 1*, 2023 - 06 - 14 (A03). DOI: 10.28207/n.cnki.ndycj.2023.002901.